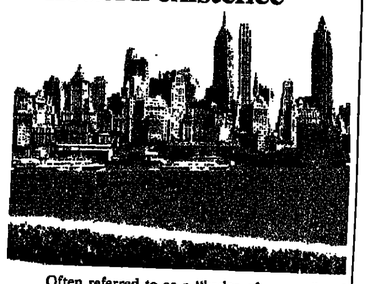
G.I. FORUM

A CURRENT REVIEW OF INVESTIGATIONS IN GASTROENTEROLOGY

Global evidence disputes concept of peptic ulcer as disease of "modern existence"



Often referred to as a "badge of success" and linked to executive suites, peptic ulcer of the duodenum has been found to be just as common among

those with no shirts as those with white collars. What factor is there in common between the "credit-card urbanite" and the "clinic-card hut-dweller"?

What the patient eats vs. what "eats" the patient

The role of stress and anxiety in the development of peptic ulcers is well documented—particularly in Western medical literature. But what about in Southern Nigeria, Southern India and Northern India?

One researcher[1] feels that the psychosomatic aspect of peptic ulceration cannot be applied to the situation of the placid Southern Nigerian bush farmer. Instead, he favors the high carbohydrate diet of yams and cassava as playing an important etiologic role. Patients with peptic ulcers in Southern India appear to share a similar dietary problem with their counterparts in Southern Nigeria, if one substitutes rice for yams.

A study[2] of certain workers in a railway town in Northern India revealed a high incidence of peptic ulcer in spite of the unhurried pace of life there. Interestingly, the patients were mostly rice eaters (in an area where wheat is a staple in the diet), and their ulcers closely resembled those found in Western countries, considering the high incidence of complications, such as bleeding and perforation.

Perhaps a link exists between diet and the etiology of peptic ulcer. One author[3] believes that the basic problem in the causation of peptic ulcer is the interference with the buffering of gastric acid by food through the removal of protein in the refining of carbohydrates.

Diet, or bad dietary habits, cannot be completely dismissed in the pathogenesis of our own classic "executive" ulcers... excesses such as the 3-martini lunches or abnormally long intervals between meals, for example. On the other hand, some investigators might be overlooking the existence of factors productive of excessive anxiety in parts of the world where life is seemingly quiet and pastoral. One clinician studying duodenal ulcer disease in Nigeria[4] lists emotional factors as possibly contributing to the causation of the ulcers; he defers discussion, however, pending the completion of socioeconomic studies.

References: 1. Konstam, P. G.: *Lancet*, 2:1039, 1954. 2. Malhotra, S. L.; Majumdar, C. T., and Bardoloi, P. C.: *Gut*, 5:355, 1964. 3. Cheuve, T. L.: *Peptic Ulcer: Causation, Prevention, and Arrest*, Bristol, England, John Wright & Sons Ltd., 1962, p. iii. 4. Amure, B. O.: *Practitioner*, 199:330, 1967.

One piece of the ulcer puzzle—excessive anxiety due to stress

Though not applicable in all cases, there is no doubt that, at least in Western medical practice, anxiety-linked peptic duodenal ulcer symptoms are commonly seen. The combination of excessive anxiety and certain somatic symptoms in patients with duodenal ulcer underlies the basic rationale for dual-action Librax therapy.

The logic of adjunctive Librax®

Only Librax combines in a single capsule the well-known antianxiety action of Librium® (chlordiazepoxide HCl) with the anticholinergic action of Quarzan® (clidinium Br). Both actions can contribute significantly in helping to bring relief of anxiety-linked gastrointestinal spasm and associated pain. The causes of ulcer are perhaps multiple and their roles perhaps still awaiting interpretation, but the place of Librax in the total medical regimen of duodenal ulcer remains assured.

Up to 8 capsules daily in divided doses

For optimum response, dosage may be adjusted within the recommended range of from 1 to 2 capsules 3 to 4 times daily... taken before meals and at bedtime. Such an adjunctive regimen can help the patient maintain his therapeutic gains.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Symptomatic relief of hypersecretion, hypermotility and anxiety and tension states associated with organic or functional gastrointestinal disorders; and as adjunctive therapy in the management of peptic ulcer, gastritis, duodenitis, irritable bowel syndrome, spastic colitis, and mild ulcerative colitis.

Contraindications: Patients with glaucoma; prostatic hypertrophy and benign bladder neck obstruction; known hypersensitivity to chlordiazepoxide hydrochloride and/or clidinium bromide.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering Librium (chlordiazepoxide hydrochloride) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards. As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude development of ataxia, oversedation or confusion (not more than two capsules per day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

for anxiety-related symptoms of duodenal ulcer

adjunctive Librax®

Each capsule contains 5 mg chlordiazepoxide HCl and 2.5 mg clidinium Br.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc
Nutley, N.J. 07110

Does Schizophrenia Protect Against Cancer? Pg. 9

Rubella Immunization for Young Women? Pg. 3

Medical Tribune

and Medical News

©1972, Medical Tribune, Inc. A B

world news of medicine and its practice—fast, accurate, complete

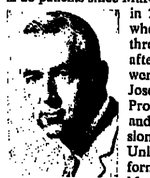
Wednesday, December 20, 1972
Vol. 13, No. 49

Implant Stops Incontinence After Surgery

Medical Tribune Report

NEW ORLEANS—Correction of postprostatectomy incontinence by means of a silicone-gel prosthesis implanted over the urethral bulb was reported here to achieve a higher rate of excellent results than other procedures employing the concept of perineal compression of the bulbous urethra.

The new technique has been performed in 28 patients since March, and the results in 21 of the patients who were followed three to five months after implantation were reported by Dr. Joseph J. Kaufman, Professor of Surgery and chief of the division of urology at the University of California School of Medicine, Los Angeles. He was the guest speaker at the Section on Urology of



DR. KAUFMAN

Continued on page 24

Silicone-gel prosthesis, opacified by a post-operative injection of sodium diatrizoate, is illustrated here in the urethrogram.

'Twas the Night Before...

"Which way to the pediatric wing?"

©1972 Medical Tribune

A.M.A. House Agrees to Drop Drug Council, 9 Other Units

Medical Tribune Report

CINCINNATI—The American Medical Association, trying to move its operating budget out of the red, got the support of its policy-making delegates here—but only after a parliamentary skirmish.

The floor fight in the House of Delegates at the A.M.A. Clinical Convention revolved around a cost-cutting move by the Board of Trustees to eliminate four councils and six committees of the organization. The dispute focused on the dismantling of the prestigious Council on Drugs, which is generally regarded as a valuable arbiter of pharmaceutical use.

Louisiana, home of the current chairman of that council, Dr. Harry Shirkey, and of a long-time former chairman, Dr. John Adriani, moved to rescind the trustees' death knell for the drug panel. When that move was defeated in a House committee report, a delegate from the A.M.A. Section on Clinical Pharmacology tried to write it back in from the floor.

But that ploy and a subsequent similar attempt by another delegate were voted down by a majority of the 241-member House. The delegates appeared convinced by the trustee's assurance that an in-house "department on drugs" would continue the council's work, including the publication of a second edition of *A.M.A. Drug Evaluations*. The book has come to be a practitioner's standard reference.

On a more medical matter, the delegates rebuffed urgings by both the U.S. Public Health Service and the American

Continued on page 5

Bronchitis May Be Reversible, Data Indicate

Medical Tribune Report

DENVER—The accepted view of chronic bronchitis as a progressive and irreversible disease may be open to question, according to findings reported here by a University of Illinois team.

Data in 1,236 middle-aged males who were surveyed in 1961 and again in 1968 suggest that "the symptoms of airway obstructive phenomena of chronic bronchitis may be reversible" and that criteria for diagnosis of the disease should be reexamined, said Dr. John T. Sharp, Professor of Medicine at U. I.

Upsetting the epidemiologic expectations, Dr. Sharp reported, the incidence of such common respiratory symptoms as persistent cough, dyspnea, wheeze, expectoration, and their combinations were found to be less prevalent in the second survey than in the first. Although this observation could be explained by the "impressive drop" in cigarette smoking in the study population—from 52 per cent to 35 per cent—nonsmokers also showed a reduction of symptoms over the seven-year

Continued on page 9

Dietary Supplement May Cut Mortality Of Low Birth Weight

Medical Tribune Report

NEW YORK—A study of 15,000 consecutive births at New York's Harlem Hospital indicates that diet supplements for pregnant women may prove effective in reducing the perinatal mortality associated with low birth weight, a Columbia University pediatrician reported here.

Dr. David Rush, Assistant Professor of Epidemiology at the School of Public

Continued on page 5

Expert Round Table Devoted to Ischemic Heart Disease

*An outstanding feature of the WHO-*MEDICAL TRIBUNE *symposium on ischemic heart disease, held in Madrid, was an international round-table discussion in which leading experts from many countries participated. They were Dr. M. F. Oliver, director, Heart Disease Prevention Clinic, Royal Infirmary of Edinburgh; Dr. J.-L. Beaumont, of the Faculté de Médecine de Créteil and one of France's leading researchers on atherosclerosis; Dr. Zdenek Fejfar, chief, Cardiovascular Section, World Health Organization; Prof. A. E. Renold, of the Institute of Clinical Biochemistry, Geneva, Switzerland; Dr. E. Nikkilä, Department of Medicine, Helsinki University; and Dr. V. I. Janushkevichis, rector, Medical Institute of Kaunas, Lithuanian Soviet Socialist Republic.*

MEDICAL TRIBUNE: The WHO symposium held in Madrid with our sponsorship brought together some of the leading researchers in the field of ischemic heart disease. Their ultimate aim is prevention.

Continued on page 24

Discussing the WHO–MEDICAL TRIBUNE round-table meeting on ischemic heart disease are, left to right, Dr. Oliver, Dr. Arthur M. Sackler, International Publisher of MEDICAL TRIBUNE, and Dr. Fejfar, chief of the WHO Cardiovascular Section. Dr. Oliver advocated the need for a rigorously scientific approach to problems of scientific research.

Round-table participant Dr. Beaumont has been honored by the French Government with the title of Chevalier de l'Ordre National du Mérite for his scientific work.

MEDICAL NEWS—INTERNATIONAL ROUNDUP

Dr. Sabin to Retire as Head Of Weizmann Institute Jan. 1

Medical Tribune World Service

REHOVOT, ISRAEL—Dr. Albert B. Sabin will retire from the presidency of the Weizmann Institute of Science on January 1 for reasons of health, after holding that post for the past three years.

This was announced here at the annual meeting of the institute's board of governors, by Abraham Feinberg, chairman, who expressed the institute's deepest regret.

DR. SABIN

Dr. Sabin, who recently underwent open heart surgery, will spend the coming year in the United States at the National Institutes of Health as a Fogarty Scholar.

The board of governors elected Prof. Israel Dostrovsky, the institute's vice-president, as acting president and chief executive officer. Professor Dostrovsky, a physical chemist, has been a member of the institute's scientific staff since 1948, much of that time as head of its isotope research department. From 1965 until 1971 he also served as director general of the Israel Atomic Energy Commission.

Dr. Sabin, who is 66 years old, assumed the presidency of the Weizmann Institute of Science on January 1, 1970, after four decades in medical research. On January 27, 1971, President Nixon named him a 1970 winner of the National Medal of Science, the U.S. Government's highest science award, in recognition of his "numerous fundamental contributions to the understanding of viruses and viral diseases culminating in the development of the vaccine which eliminated poliomyelitis as a major threat to human health."

For more than 30 years, until he assumed the Weizmann Institute presidency, he served with the Children's Hospital Research Foundation of the University of Cincinnati, the last nine of them as Distinguished Service Research Professor.

Dr. Sabin is a member of the advisory board of MEDICAL TRIBUNE.

■

Primary Cancer of Stomach Rate In Europe Held Close to Japan's

Medical Tribune World Service
From West German Edition

PARIS—Improved investigative techniques show that primary carcinoma of the stomach is just as prevalent in Europe as in Japan, a Swiss investigator told the second European Congress on Digestive Endoscopy here.

Dr. Miller, who is consultant physician in gastroenterology at the Solothurn general and Niederbipp district hospital, Switzerland, said that in Japan 28,390 clinical examinations for primary carcinoma of the stomach showed a mean of 0.88 per cent. In Switzerland, he said, incidence figures in the 1968-71 period include: Clemencon (Olten), 0.72 per cent in 1,250 examinations; Baumgartner (Winterthur), 0.66 per cent in 450; Miller (Solothurn), 0.61 per cent in 1,291.

In Copenhagen, Bisgaard-Pedersen found 0.95 per cent cases of primary stomach carcinoma in 2,300 examinations, while in Stuttgart, West Germany, Heinkel recorded 0.5 per cent in 3,000, Dr. Miller said.

"These figures," he commented, "go to show that whenever systematic examinations for primary carcinomas are undertaken, they are found to be as frequent in Europe as in Japan."

Hygiene Is Checked

WHO Photo

Spot checks of food establishments by public health inspectors in Guatemala are part of the nutrition and dietetics control program based at the Bromatologic Laboratory in Guatemala City.

1% of Mortality in 19 Nations Is Attributable to Poisonings

Medical Tribune World Service

GENEVA, SWITZERLAND—Fatal poisonings as reported by 19 industrialized countries represent about 1 per cent of their total mortality.

But accidental poisonings, at least as officially reported, are the cause of relatively few deaths. Suicides account for about 75 per cent of all fatal poisonings, according to a World Health Organization statistical study.

In accidental as well as purposeful poisonings, medicines and drugs play an important part, the report said.

Accidental poisonings by car exhaust, it also noted, remain far too frequent because so easily avoided and may conceal a large proportion of suicides.

Children are the principal victims of homicidal poisonings, the study found. Thus, in Canada, out of 16 poisoning homicide victims, 13 were under 15 years of age. In Japan the figure was 327 out of 361, in Belgium, six out of nine, and in the Federal Republic of Germany 60 out of 73.

The WHO study covered the years 1961-69.

■

Indian Population Still Rising Despite Family-Planning Effort

Medical Tribune World Service

DELHI, INDIA—The 1971 Indian population census figures show an upward bound despite the efforts of the national family-planning campaign.

The annual growth rate in the decade 1961-71, when the population control drive was at its peak, was not only 2.48 per cent higher than in the previous 10 years, but also the highest since the first census was taken a century ago.

In the 1961 census, India's population was put at 439,070,000. The 1971 census count was 547,950,000.

■

GPs Are Believed at Risk Of 'Colonization,' Turning Into Psychosocial Doctors

Medical Tribune World Service

MELBOURNE, AUSTRALIA—The general practitioner runs a risk of being "colonized" by the social workers and other ancillary personnel on the health team and of becoming purely a "psychosocial" doctor, a principal in a Melbourne group practice warned the fifth World Conference on General Practice here.

The speaker, Dr. Neil E. Carson, said the G.P. should be the "core" of the health team. "What's the point of doing eight years' training for general practice if your job only requires four years' study in social work?" he asked.

But Dr. John H. Owen, a British G.P., whose topic was "The Social Worker Joins the Team," cited a survey indicating that over one-third of patients consult their physicians because of social problems.

Believes Health Team Will Grow

Dr. Owen prophesied that the health team will grow to include paramedical collegues, such as physiotherapists, occupational therapists, orthoptists, speech therapists, transport officers, and possibly even medical photographers.

Dr. Earl Dunn, a member of Toronto University's Family Medicine Department, argued that the family doctor should not necessarily regard himself as the leader of the health team. The team would function best if all members had equal status irrespective of their abilities and competence, he asserted.

In a new health center formed by Toronto University, he related, a nurse is the team leader in the sense that she coordinates activities and has the final say if team members disagree.

Dr. Selwyn J. Carlson, a Christchurch, New Zealand, general practitioner, said: "We should make no bones about it. The G.P. is the over-all leader of the team. The G.P.'s colleagues in the health team—the nurse and the social worker—are his expert assistants."

At a press conference later, Dr. Dunn explained that he is against a hierarchical structure in the health team mainly because he wants to prevent patients from manipulating team members.

"If the G.P. is obviously the team leader, then a patient who has been told something by the nurse can go to him and try to have the advice reversed," he said.

Dr. Dunn believes that nurses, social workers, and other allied health professionals should do some of their training with medical students, to prepare them for teamwork later.

Dr. Carson strongly criticized the concept of the G.P. and the health center recently advanced by an Australian Medical Association study group on medical planning, which expressed the view that G.P.s should not develop special interests in surgery or general anesthesia.

"These proposals spell the end of general practice," Dr. Carson said. "Group practices should not be prevented from offering major specialist services."

Should Sexual Growth Be Encouraged In Mentally Retarded? Experts Differ

Medical Tribune World Service

MONTREAL—The question whether the sexual development of the mentally retarded should be encouraged caused sharp differences of opinion at the fifth International Congress on Mental Retardation, held here.

There is strong evidence that mentally retarded couples are much more likely to produce retarded children than the general population, a physician warned.

Probably Due to Combination

"This does not necessarily imply that it is due to inherited mechanisms, but is probably due to a combination of both environmental and inherited factors," said Dr. John B. Fotheringham, of the Department of Special Education at the Ontario Institute for Studies in Education.

"It is my contention, therefore, that, as a general rule, retarded persons should not have children," he told the congress.

A different view was taken by Robert Perske, executive director of the Greater Omaha Association for Retarded Children.

Although the retarded are much slower than average in sexual development, he said, there is no reason why some cannot develop to the point of assuming responsibility for a mature marriage relationship. Indeed, he said, some have formed "beautiful emotional partnerships and have been more loving and tender than some intellectuals."

He cautioned, however, against "crash courses in sex education for the mentally retarded" and "a pushing together of retarded males and females without being sensitive as to whether they want to be together."

CLINICAL NEWS NOTE: *"Clearly it would be useful to have more universally applicable criteria which would identify with more certainty [the chronic bronchitic] who will develop progressive disabling [lung] disease." (Dr. J. T. Sharp, page 1.)*

NEWS INDEX

FEATURE INDEX

MEDICAL TRIBUNE is published each Wednesday by Medical Tribune, Inc., 880 Third Avenue, New York, N.Y., 10022. Controlled Circulation postage paid at Farmingdale, N. Y. 11735. Subscription $12.50, Students, $7.50.

Roentgenography Aids Diagnosis In Dilatation-Curettage Problems

Medical Tribune Report

WASHINGTON—Roentgenography can help diagnose delayed complications of uterine dilatation and curettage as well as prevent problems related to the intra-amniotic injection of saline in abortion programs, two Bronx, N.Y. physicians said here.

The delayed sequelae of dilatation and curettage that the radiologist may expect to encounter include the development of uterine adhesions or synechiae—the Asherman syndrome — and incompetence of the internal os, Drs. Wilhelm Z. Stern and Leo Wilson told the annual meeting of the American Roentgen Ray Society.

"Roentgen examination is the key to the diagnosis of the Asherman syndrome," said Drs. Stern and Wilson, of Montefiore Hospital and Medical Center–Morrisania Hospital.

Films of the uterine cavity show bizarre and sometimes linear or ovoid filling defects, which may be single or multiple, large or very small, and generally well demarcated and not effaced by increasing amounts of contrast.

May Occasionally Branch

The radiolucent defects may occasionally branch or may resemble a heart or a window. The distinction from air bubbles is apparent, since the latter are round and inconstant images.

Drs. Stern and Wilson said they used a simple method to study the internal os or uterine isthmus—a conventional hysterogram in which the lower cervical canal is obturated with a rubber acorn. Three or 4 ml. of contrast is introduced into a balloon within the uterine cavity, traction is exerted on the balloon, and a roentgenogram is obtained. A small amount of contrast is then removed from the balloon, and further traction is exerted while the x-ray is repeated. A balloon will then usually assume the shape of the isthmus and upper cervical canal, allowing their evaluation.

Of the 3,569 elective abortions performed at Morrisania City Hospital between July 1, 1970, when New York State liberalized its abortion law, and June 30, 1972, 813, or 23 per cent, were induced by intra-amniotic hypertonic saline injection. The length of pregnancy in 81 per cent of the 813 patients was between 15 and 20 weeks. Abortion occurred from 12 hours to four days after saline injection, with most patients aborting in 24 to 36 hours.

"Amniocentesis is usually a simple and easy procedure," the physicians said.

"However, in 4.5 per cent of cases there was difficulty in obtaining amniotic fluid. Obesity, uterine fibromyomata, a small uterus, overestimation of gestational age, oligohydramnios, various malpositions of the needle tip, or a hydatidiform mole may account for the failure to obtain amniotic liquid."

To overcome such difficulties and avoid the possibly dangerous lodgment of the 16-gauge needle intramuscularly, intraperitoneally, or intravascularly, water-soluble contrast medium may be injected through the same needle to enhance its proper placement in the amniotic sac.

"Radiological monitoring is particularly helpful in the early stages of an abortion program when extensive experience is lacking," the physicians said. "Malpositions of the needle tip in the peritoneal cavity are readily recognized. Similarly, an inadvertent intraplacental or intravascular injection can be seen under fluoroscopic control, and serious reactions are averted."

One reason for the failure of amniocentesis may be the presence of a hydatidiform mole, in which case the amniotic cavity does not develop properly. The injection of radiopaque contrast medium into the uterus helps establish the condition by resulting in a highly characteristic appearance of multiple small spheroid radiolucent images due to the cystic, grapelike villi in the reticulated contrast network of the intervillous spaces.

U. of Md. Expands Family Practice Plan

Two Federal grants have enabled the University of Maryland School of Medicine's family practice program to expand the training of school's students and residents. Two patients in the program, above, talk with senior medical student Jeff Blum.

Discussing case with student David Herman, Dr. Steve Levin (wearing glasses) employs x-ray. In the program, specialists and consultants discuss specifics with residents. Residents also travel and are able to participate in conferences and courses in other parts of the country.

Thomas Long, senior medical student at the U. of M., assists patient in registration. Students will leave the school for a three-month period and work closely with preceptors, usually physicians in private practice. Dr. Roy Guyther, Associate Professor of Family Practice, is director of the preceptorship program.

Rubella Vaccine Urged for Young Women, but Within Limits

Medical Tribune Report

NEW YORK — Immunization against rubella for women of childbearing age was recommended here by a New York University pediatrician but with important provisos about selection of patients.

No woman should receive rubella vaccine unless she has first been tested by specifically trained technicians and found susceptible to the virus, Dr. Saul Krugman said during a discussion of immunizing agents at the annual meeting of the **American Academy of Pediatrics.** Dr. Krugman serves on the A.A.P. Committee on Infectious Diseases.

Noting that about 85 per cent of women are immune to rubella, the investigator warned that failure to find out the status of each woman before administering the vaccine will lead to trouble if she should become pregnant.

This has been the sequence of events in more than 200 cases on record, he said. Since no one knew whether or not the women had originally been immune, a number of therapeutic abortions—"many of them unnecessary" — had to be performed.

Dr. Krugman's second stipulation is that any woman considered a candidate for rubella vaccine should definitely not be pregnant at the time of immunization and should be cautioned strongly against becoming pregnant for at least two months afterward. Studies of women already scheduled for therapeutic abortion, he pointed out, have demonstrated that rubella virus can be recovered from fetal tissues if the vaccine is given in advance of pregnancy interruption.

Now that facilities competent to test for susceptibility are available in many areas of the country, Dr. Krugman believes the "time has come" to immunize as many girls and women of childbearing age as possible, while continuing all efforts to immunize children.

The success of the child immunization program—which dates from licensure of the rubella vaccine in 1969 — cannot be fully evaluated until sometime next spring, the investigator said. Rubella epidemics usually occur every six to nine years and the last one struck in 1964.

But Dr. Krugman cited the experience registered last year in Bermuda as evidence that intensive immunization efforts here may have spared the United States an epidemic in 1971. The pattern of epidemics has been similar in these two countries for more than four decades.

Bermuda did not develop an immunization program and in 1971 had the beginnings of a significant epidemic that was aborted only when thousands of doses of vaccine were administered to children. No corresponding rise in cases was seen in this country, despite tourist travel.

"This doesn't mean we have the answer to the problem," Dr. Krugman commented. "All we can say at the present time is that the prognosis looks good."

Reports Presented on Status Of Other Major Vaccines

From Duke University

► Reports on the current status of other major vaccines were outlined during the discussion by Dr. Krugman and copanelist Dr. Samuel L. Katz, of Duke University School of Medicine, who heads the A.A.P. Committee on Infectious Diseases.

• Relaxation in the program of measles immunization led to a "mild resurgence" of the disease in 1970 and 1971. A number of reported cases of vaccine failure have been caused by breaks in technique, including the practice of allowing the diluted vaccine to remain exposed to light for hours before administration.

• No change is being made at this time in recommendations about pertussis vaccine but surveillance continues on the incidence of untoward reactions.

• In the year following the recommendation to discontinue routine smallpox vaccination, there has been a marked decrease in use of vaccinia immune globulin. Between January and June of this year, fewer than 300 vials were distributed, compared with nearly 800 vials in corresponding months of 1970 and 1971. Many of the vials distributed this year were requested for prophylactic use rather than for treatment of complications.

• Influenza vaccine is recommended only for children in high-risk groups.

• The efficacy and safety of such combined vaccines as the measles-rubella and measles-mumps-rubella agents has been demonstrated. Additionally, it is feasible to administer rubella vaccine (Cendehill strain) and Schwarz measles vaccine in separate syringes—and at different sites—during the same office visit.

Med Schools Said to Ignore Research on Patient Care

Medical Tribune Report

MIAMI, FLA.—Dr. Howard H. Hiatt, dean of the Harvard School of Public Health, criticized medical schools for having largely ignored research on the quality or effectiveness of patient care.

While "biomedical research has helped provide a solid base of scientific critique to medical education and patient care . . . improved medical measures often have negligible effects on health in the absence of improvement in nonmedical factors," he told a meeting of the Association of American Medical Colleges.

He cited as an example a study carried out in a rural Indian community that was beset by illness and poverty. It was found that medical care alone, without other social change, had a limited effect on health parameters, including infant mortality.

"Mechanisms should be created," Dr. Hiatt said, "to examine not only what a new treatment will cost, but in a world of limited resources, whether it is worth more than what we must give up in its place. If, for example, the coronary care unit should be shown to help some patients with cardiac disease, how do its costs and benefits compare to those of activities that have been displaced?

"The very areas of startling technical success in medicine, such as renal dialysis and cardiac surgery, have been the dramatic provocations that underscore the problems of limited resources."

ECTOPIC BEAT

"Dr. Anthony Dobell who led the original transplant team, said Mr. Parkinson's heart 'was working until the end'."

—*New York Times.*

Another breakthrough?

(Regular beat: Immateria Medica, page 30.)

Mexico vs. Wisconsin

A young child from Huixquilucán, Mexico, part of a cholesterol study of 500 children ages five through 14 from Mexico and Monroe, Wis., being conducted by the U. of Wisconsin, is given a blood test. Researchers, led by Rjurik Goldshtnikov, have found that cholesterol levels of the Wisconsin children are nearly double those of Mexicans.

Child Gynecologic Tumors Yielding to Therapy

Medical Tribune Report

ST. LOUIS—While malignant gynecologic tumors in children were once nearly always lethal, some success is now being achieved, thanks to a better understanding of these tumors and the use of new superradical therapeutic methods, Drs. Julian P. Smith, Felix Rutledge, and Wataru W. Sutow, of the University of Texas M. D. Anderson Hospital and Tumor Institute, reported here.

They reviewed their experience with 33 such patients, all under the age of 14 years, at the 40th annual meeting of the Central Association of Obstetricians and Gynecologists. The most common site of the cancer was the ovary, as was seen in 22 of the 33 patients. Other sites were the vagina, in five patients; the bladder, in three; and the vulva, in two. One patient was seen with a rhabdomyosarcoma of the uterus.

In pediatric patients, they noted, ovarian cancer differs in several respects from that in adults. While epithelial tumors are most common in the latter, in children the germ cell tumors—malignant teratomas, dysgerminoma, embryonal carcinoma, and choriocarcinoma—predominate. Whereas in the adult patient the cancer frequently extends beyond the pelvis when first examined, in the pediatric patient this is less frequent. Ascites, a frequent presenting complaint with adult ovarian cancer patients, was present in only six of their patients.

"Location and treatment with adequate irradiation of the sites of metastatic disease," they said, "may afford the patient with dysgerminoma of the ovary a chance for cure." All six of their patients with pure dysgerminoma, they reported, "are without evidence of cancer three to four and a half years after treatment."

Intensive Chemotherapy Helps

Children with embryonal carcinoma of the ovary, they said, may benefit from intensive chemotherapy used in addition to the indicated surgical procedure. Noting that this tumor is radioresistant, they recommended that postoperative irradiation be used "only when the greater part of the tumor is dysgerminoma or if the tumor has metastasized as dysgerminoma."

Of six patients with embryonal carcinoma of the ovary who received postoperative chemotherapy, they reported, four are still receiving chemotherapy and another is without evidence of cancer four and a half years after surgery and two years of postoperative chemotherapy. The sixth patient died. Of five patients treated with postoperative irradiation, however, all died from three to 16 months after surgery.

Treatment for malignant teratoma, they said, is similar to that for embryonal carcinoma, "except that both ovaries and the uterus should be removed since these tumors are frequently bilateral." One of their patients with a teratoma has recently completed two years of chemotherapy and it has now been possible to halt this treatment, they reported. Another child died three months after surgery and chemotherapy.

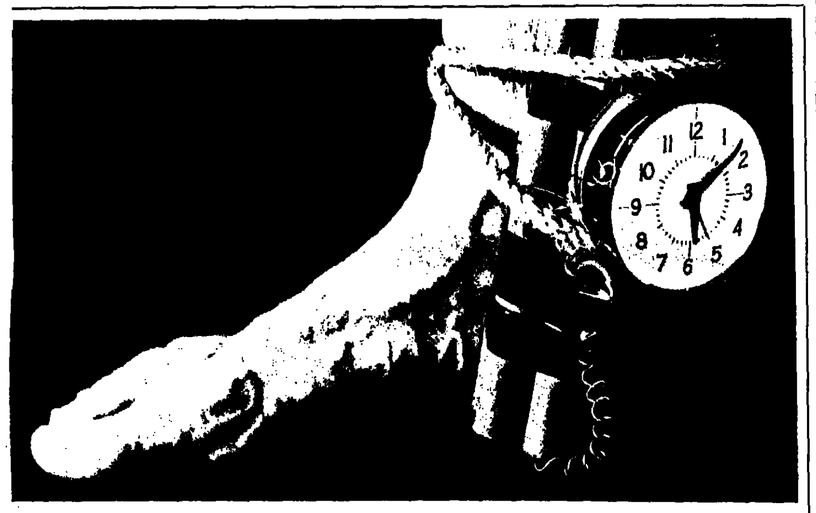
One patient with choriocarcinoma of the ovary who was given chemotherapy is at present in complete remission with normal human chorionic gonadotropin titers for eight months, the physicians said.

For patients with rhabdomyosarcoma of the pelvis, the most effective treatment, they said, may be a combination of chemotherapy and irradiation. Their one patient was a five-year-old whose tumor had been partially removed in another hospital. When first seen at their hospital, the tumor filled most of the lower abdomen and was thought too large to be removed with radical surgery. She was given chemotherapy combined with irradiation and "is living without evidence of recurrent sarcoma more than three years after completing her treatment," the investigators reported.

Pelvic exenteration has improved the situation for patients with sarcoma botryoides, which they said is the most common malignant tumor of the lower genital tract in children and is associated with lymph node metastases.

"Since this tumor arises in the connective tissue of the wall of the vagina, bladder, cervix, and uterus, obviously any surgical procedure that divides the vagina or cervix from the bladder or rectum may cut through the tumor to leave microscopic foci behind," they warned. "It is also necessary to remove the entire vagina or bladder as sarcoma botryoides may be multifocal."

Three of six girls who had pelvic exenteration, they reported, are without evidence of recurrent cancer more than three years after the surgical procedure and one who had an exenteration 14 months ago is living without evidence of cancer. Two of the six died, as did one child who underwent radical hysterectomy and vaginectomy.



Comprehensive Care Aides To Be Trained at Hopkins

Medical Tribune Report

BALTIMORE—A $310,000, 18-month contract to train workers needed to deliver comprehensive care in a Health Maintenance Organization has been received by the Johns Hopkins University School of Health Services from the Health, Education, and Welfare Department.

A total of 59 persons will be trained in ambulatory and inpatient care, including health and emergency room associates and assistants, coronary care associates, and nursery associates. The contract was awarded under the Comprehensive Health Manpower Training Act of 1971.

COMING NEXT ISSUE

- **Hypertension**
  Earlier treatment of patients with high renin levels urged.
- **Cancer**
  All forms may result from alterations in cell surface.
- **Angina**
  Cardiopulmonary function hindered by CO in traffic.

A.M.A. House Agrees to Drop Drug Council, 9 Other Units

Continued from page 1

Academy of Pediatrics to discontinue routine immunization of children against smallpox. Instead, the House approved a policy statement reading, in part:

"Physicians, while observing contraindications, have the option of immunizing patients against smallpox, whether or not immunization is required by the U.S. Public Health Service or other countries."

A committee report to the house on the matter saw that there is "obviously an irreconcilable difference of opinion among practicing physicians on the benefits derived from routine smallpox immunization programs and the degree of risk from the vaccine."

The report, however, also noted "potential liability problems" because of the earlier recommendations by PHS and the Academy of Pediatrics. The delegates, in effect, voted to make such judgments a matter for the individual physician.

Money Saving Bolstered

The money-saving efforts by the A.M.A. trustees, announced several weeks before this convention, were bolstered here by a 48-page booklet on the 1973 budget, which was distributed to all the delegates. Its figures indicate that the organization is slowly pulling itself up from its 1970 fiscal nadir, when it lost nearly $3,000,000. The loss in 1971 on operating expenses was hardly $1,000,000. The incomplete 1972 figures indicate a move into the black by $742,000.

Besides axing the four councils and six committees, the trustees also ordered—and the delegates approved—such tightening-up procedures as keeping council and committee meetings in the Chicago headquarters city (although the trustees themselves will next meet in Florida) and minimizing a number of housekeeping expenditures. In all, the trustees see a 1973 saving of about $840,000 through the cost-cutting efforts.

Another fiscal maneuver, however, was presented here as more of a cost-juggling move than a cost-paring one. This will stop the free distribution of one of the 10 A.M.A. specialty journals to members. But that saving will be offset by the free distribution of a new A.M.A. "socioeconomic magazine" to all of the members.

The magazine, called *Prism*, is expected to have its first monthly issue ready by next April. According to the trustees' description, it will "become a prime source of practical information to the practicing physician and also will contain features on personal finances and travel. "One trustee told the house that it is costing $1,200,000 to bring *Prism* through its first publishing year, during which time the advertising income is expected to be $800,000. By the end of the second year, the trustee said, the publication should be "at the breakeven point."

In some other matters, the delegates:

- Approved bestowing the A.M.A. citation of a layman for distinguished service on comedian Bob Hope for his personal contributions to the Eisenhower Medical Center, such as 80 acres in Palm Springs, Calif., and his benefit performances in behalf of medical care projects.
- Set the dues at $15 a year for medical students to be members of the A.M.A., batting down a suggestion from a student delegate who conveyed the opinion that $10 is more appealing."
- Held up approval of a statement on the "function and structure of a medical school," which has been three years in the writing in collaboration with the Association of American Medical Colleges. The delay, by referral, followed floor arguments that included the fear expressed by a California delegate that the statement provided "a facade behind which medical centers can hide to offer health care."
- Asked the trustees to study approaches against malpractice suits such as recent California legislation that makes a plaintiff post bonds to cover court costs and attorney's fees if he loses.
- Vowed to lead a campaign against gonorrhea, but not in the manner of the delegate who suggested that "the Ten Commandments also were damn good health laws."

Li Shih-chen

A diligent scholar during the Ming Dynasty, Li Shih-chen (1518-93) preferred medicine to the classics. He spent 27 years of his life compiling the *Great Herbal*, which consisted of 52 volumes, two indexes of diseases, and three books of illustrations. Detailed in this classic work were 1,074 drugs of plant origin, 443 of animal origin, and 354 from minerals, with the source of each and its preparation and dosage for each particular ailment or disease. Among those mentioned were chaulmoogra oil, ephedrine, and kaolin. The Peoples Republic of China issued the stamp in 1955 as part of a series on famous scientists of ancient China.

Text: Dr. Joseph Kler
Stamp: Minkus Publications, Inc., New York

Detecting Colon Cancer

BUFFALO, N.Y.—Carcinoembryonic antigen (CEA) testing can be useful in detecting cancer of the colon while the tumor can still be removed, it was reported by Dr. Douglas Holyoke and Tsann Chu, Ph.D., of Roswell Park Memorial Institute here.

"This cancer-monitoring ability of the CEA assay is helpful in deciding the type and timing of treatment," Dr. Holyoke commented. "For example, after surgery, radiotherapy, or chemotherapy, if the cancerous tissue has been removed or otherwise destroyed, the CEA assay will fall over a period of 14 days and remain at that lower level. However, if the CEA rises, there is reason to believe that the cancrous tissue has not been removed or completely destroyed."

A paper by Drs. Holyoke and Chu on CEA assay in patients with carcinoma of the digestive tract has appeared in the *Annals of Surgery*.

New Endotracheal Cuff

KYOTO, JAPAN—A new polyurethane foam-filled cuff that is said to produce less tissue necrosis than standard cuffs has been designed for use on endotracheal tubes.

In one long-term study of 20 patients intubated for up to six days, there was no significant evidence of tracheal wall damage, delegates to the fifth World Congress of Anesthesiologists were told by Dr. Carolyn Wilkinson, Assistant Professor in the Department of Anesthesia at Northwestern University Medical School, Chicago.

The new cuff was made by removing the cuff of a red rubber (Rusch) endotracheal tube and replacing it with a polyurethane foam cuff, 4 cm. in diameter, which was sealed with a latex covering so as to enclose the foam in an airtight sheath.

When suction is applied to the pilot tube, the cuff deflates to about 6 per cent of its inflated volume. Releasing the negative pressure allows the polyurethane foam to self-inflate and to make contact with the tracheal wall.

Warning on Anesthetic

MEXICO CITY—A recommendation that methoxyflurane be limited to short surgical procedures or withdrawn from general use was made at the fifth International Congress of Nephrology.

This was based on further evidence incriminating the anesthetic as a cause of chronic as well as acute renal failure. The evidence was offered by Drs. Benjamin A. Halpren, Richard L. Kempson, and Norman S. Coplon, of Stanford University.

Two cases of methoxyflurane nephropathy that progressed to chronic renal failure and interstitial fibrosis were described. For two to three days following abdominal surgery under this anesthesia, the patients showed the typical polyuric renal failure noted by various other authors. They then, however, developed oliguric renal failure, requiring hemodialysis.

Both patients showed x-ray evidence of shrinkage of renal mass. Renal biopsies disclosed intertubular calcium oxalate crystal deposition and interstitial fibrosis.

One patient died 14 months after surgery while under chronic dialysis. The other no longer requires dialysis.

Artificial Skin Developed

TOKYO—A new type of artificial skin for assisting the healing process in burns and other injuries has been developed here. Its chief component is collagen from cows.

A joint research team from Tokyo University and a leather-manufacturing company said that the skin is made by enzymatically breaking down collagen to its basic units and then reconstituting it.

Clinical tests are now being conducted in many hospitals here, including Tokyo University Hospital. The results so far have been favorable, according to Dr. Yasuhisa Sakurai.

Diet Supplements May Cut Perinatal Deaths

Continued from page 1

Health and Administrative Medicine, said the study clearly established that women's prepregnancy weights and the poundage gained by time of delivery are two key factors in determining birth weight of infants.

Provided these factors are taken into account, the effect of maternal age, parity, and income turn out to be "trivial," Dr. Rush told a symposium held here by the Institute of Human Nutrition, Columbia University, with sponsorship by the National Foundation–March of Dimes.

Height Alone Not a Factor

He added that height alone is not a factor so long as this dimension is considered in its relation to prepregnancy weight and gain during pregnancy.

Two other aspects of the women's histories did prove significant, according to Dr. Rush—prior birth of a low-weight infant and a history of smoking during pregnancy. He termed smoking the "most lethal of all environmental factors" revealed by the study and estimates that it results in a 30 per cent increase in perinatal mortality among women of low socioeconomic levels.

The perinatal mortality rate in Harlem, an area of New York inhabited primarily by blacks, was 72 per 1,000 live births in 1965, or almost double the rate in a typical white, middle-class area, Dr. Rush said. About 17 per cent of black infants were of low birth weight compared with 7 per cent of the whites.

A pilot project is now under way to supplement the nutritional intake of women registered in Harlem Hospital's prenatal clinic, he reported. Women agreeing to participation are selected on a randomized basis to receive one of two types of daily diet supplement—a high-protein, high-calorie beverage providing approximately 40 Gm. of protein and 450 calories or a beverage yielding 300 calories and 6 Gm. of protein.

The program will eventually include 1,000 women. An evaluation will be made of the effects of maternal nutritional supplementation on birth weight, and the investigators will make follow-up studies to see if this supplementation has any effect on postnatal development of infants.

Pregnancy Supplements Raise Infants' Mean Birth Weight

From Instituto de Nutrición

► A similar program conducted among pregnant women in four impoverished villages of Guatemala has already produced evidence that even modest supplementation of calorie intake during pregnancy will raise the mean birth weight of infants.

Each 10,000 calories given to augment the diets of such women increased the average birth weight of newborns by 50 Gm., said Dr. Jean-Pierre Habicht, of the Instituto de Nutrición de Centro América y Panamá. The supplements used were beverages, one containing 18 per cent of its calories in the form of protein and the other of identical calorie yield but without protein.

The association between higher birth weight and maternal diet supplementation was independent of maternal age, parity, and height, Dr. Habicht noted. Other unrelated factors were length of gestation, interval since last birth, home diet, illnesses during pregnancy, sex of infant, and socioeconomic status.

Two study findings were described by Dr. Habicht as surprising. The investigators had expected, he said, to observe a difference between the results achieved with the protein-rich supplement as compared with those produced by extra calories alone. Instead, the presence of protein apparently had "little if any additional effect" over that of calorie intake.

"We have, however, measured the results only in the quantitative terms of additional birth weight," Dr. Habicht commented. "It remains to be seen if 'more' baby means 'better' baby."

The second surprise was that the timing of the supplementation during pregnancy seems to make little difference in the effect on birth weight.

The differences seen in birth weights between infants of poorly nourished mothers and those born to women on supplemented diets were similar regardless of when the extra calories were ingested.

Social Problems Are Held Chief of Those Unsolved

Medical Tribune Report

MIAMI BEACH, FLA.—The most critical unsolved health problems that confront academic health institutions entail social and environmental factors that have been neglected in the past, Dr. Howard H. Hiatt, dean of the Faculty of Public Health, Harvard University, said here at the annual meeting of the Association of American Colleges. Problems include mental disorders, behavioral aspects of health maintenance, geriatric and other chronic illnesses, difficulties in access to health care, and the effects of poverty on health, Dr. Hiatt said.

"One of our major mistakes in recent decades has been the assumption that our responsibilities began and ended with biologic research and its application to individual patients," he emphasized.

Academic health centers have omitted to establish any over-all health research policy, to evaluate adequately the benefits and costs of clinical procedures, and to take an active interest in patient care research, Dr. Hiatt said.

Current problems cannot be solved without the help of experts in such nonmedical fields as law, economics, business management, decision theory, engineering, and ethics, he said, adding that to obtain their participation "new kinds of people must be trained and new institutional arrangements will be required."

The management of anxiety: some important considerations

The increasing awareness of anxiety as a clinically significant factor is confirmed in the growing professional conviction that the understanding of anxiety is fundamental to the understanding of behavior and its reflection in the psychic and somatic reactions of modern man.

Increasingly, physicians are assuming responsibility for helping their patients to deal with this problem.

Before undertaking the management of anxiety, a number of factors must be weighed. Some important considerations are:

1. Is the patient's anxiety clinically significant?

The patient's anxiety is clinically significant if it is undue and excessive—that is, exaggerated, inappropriate, grossly disproportionate to the external or internal circumstances that trigger or sustain it. It is clinically significant if it produces an overreaction to stress that manifests itself in psychic and somatic consequences, provoking functional complaints or exacerbating organic symptoms. It is clinically significant if it seriously interferes with or depletes the patient's capacity to handle the pressures and problems of life.

2. Why is it important to distinguish between clinically significant anxiety and normal anxiety?

It is essential to distinguish between clinically significant and normal anxiety because only the former requires treatment.

Clinically significant anxiety exerts a destructive pressure that needs skillful professional intervention until it is relieved and the maladaptive behavior and negative reactions it induces subside. Clinically significant anxiety can overwhelm, sometimes even immobilize, a patient, exacerbating many conditions—angina pectoris, ulcerative colitis, peptic ulcer—compromising convalescence, as for instance from myocardial infarction. It is a liability that should be discharged.

Normal anxiety, on the other hand, is a reasonable, appropriate force that, in moderation, increases alertness and effort, motivates learning and growth, expedites decision-making and action, stimulates adaptation. To treat it would be to deprive the patient of the growth-conducive benefits of developing positive coping mechanisms with which to face and solve the problems of daily living. It is an asset that should be conserved.

3. What are the therapeutic options in the treatment of clinically significant anxiety?

Once the patient's anxiety has been diagnosed as clinically significant and therefore deserving of treatment, the physician may consider a number of therapeutic approaches to be tried in sequence and to be used singly or in combination as the situation warrants.

First resort is counseling and reassurance, frequently sufficient in themselves to help the patient recognize and modify his maladaptive behavior, often encouraging him to undergo a corrective experience and learn less anxious, more appropriate ways of living.

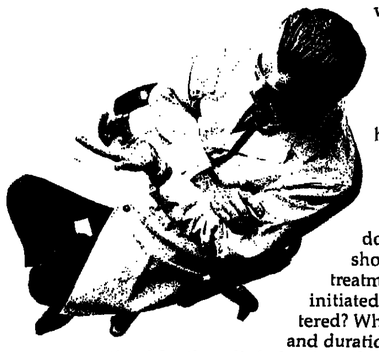
Second step is the identification and mobilization of any favorable factors in the patient's environment that could conceivably help to reduce his anxiety.

Third measure—if the former two prove insufficient—is to add pharmacotherapy, tailored to the individual patient's needs and response, monitored frequently and terminated as soon as the patient, relieved of the symptoms of excessive anxiety, can once more perform effectively without psychotropic medication.

On occasion, the patient's condition may necessitate referral to a psychiatrist or admission to a psychiatric facility.

4. What enters into the selection and use of a particular drug for the treatment of clinically significant anxiety?

This question can best be answered by asking other questions. What criteria determine which drug treatment is applicable? If several drugs are promising, is one better than the others? In what way or ways? Does one among them have fewer undesirable side effects? At what dosage level should drug treatment be initiated? How altered? What dosage and duration of therapy are optimal for the relief of a given degree of excessive anxiety, considering both short-term benefits and the possibility of symptom recurrence? What effects may be due to the patient's environment? Does the drug interact with other drugs in the patient's total medical regimen? How long will it be before the patient can perform effectively without it and therapy can be terminated?



5. How closely should the drug treatment of clinically significant anxiety be monitored?

Because response to drugs varies from individual to individual, frequent supervision of the patient is necessary to appraise the drug's efficacy at different dosage levels and at different stages in therapy and to determine how soon drug treatment can be terminated. Furthermore, such supervision insures that the patient does not exceed the prescribed dosage. And close monitoring is essential if the patient is known to be addiction-prone or when his history suggests he may increase dosage on his own initiative, improperly using a pharmacologic refuge to escape from solving the daily problems of living and adjustment.

6. For how long should the treatment of clinically significant anxiety be maintained?

Therapy should be continued until the patient's anxiety has been reduced to appropriate, tolerable levels. If treatment combines counseling, the utilization of favorable factors in the patient's environment and pharmacotherapy, it is reasonable to expect that the patient will undergo a corrective experience and acquire less anxious, more appropriate ways of living as well as symptomatic relief. These improvements will signal the termination of treatment.

Amniotic Sac May Serve as a Burn Dressing

Medical Tribune Report

SAN FRANCISCO—The abundantly available amniotic sac, normally discarded post partum, can be of further use as a biologic dressing in the treatment of burns and other massive open wounds, according to a group of Yale University plastic surgeons.

Dr. Martin C. Robson, Instructor in Surgery, told the American College of Surgeons here that data from animal experiments and preliminary indications from experience with 50 burn patients showed that the fetal membrane dressing "appears to be just as good as homo- or xenografts" in controlling infections.

Dr. Robson remarked that the fetal membranes, changed every two days, are "now used as standard biological dressings" at Yale–New Haven Hospital "for all open wounds."

In one set of experiments with 38 rats, he noted, human amniotic membranes were "1,000-fold" more effective than human skin xenografts in controlling growth of Pseudomonas aeruginosa in 20 per cent full-thickness scalds purposely dirtied with 10^8 organisms.

In another set of experiments with four 1.5-cm.-square full-thickness excisions made in each of 10 rats and with each excision inoculated with 5×10^5 Pseudomonas organisms, the human amniotic membrane was shown equal to isograft and far superior to allograft or xenograft in controlling infection.

Incomplete data from 12 human subjects with burns, dressed side by side in the same wound with fetal membrane and either allograft or xenograft, Dr. Robson said, indicate that the amniotic membranes are probably at least as good as the other biologic dressings in keeping bacteria growth low.

The reason for the efficacy of the membrane, he conceded, is unclear, although he postulated that the amniotic membrane may "create a biologically closed wound that is less complex histologically than skin," possibly through partial revascularization. Complete revascularization, which has led to problems of rejection in previous attempts to utilize fetal membrane as a skin graft, was avoided by removing the dressings every 48 hours.

Dr. Robson pointed out that fetal membranes, in addition to being readily available in large quantities at any general hospital, can be cheaply and easily cleaned, sterilized, and stored. Cleaning and sterilization were done with sodium hypochlorite, and storage was simply refrigeration at 4° C.

Dr. Robson said he has used membrane stored as long as six weeks. Sterility, checked before any use, has never been compromised.

Coauthors were Jonathon L. Samburg, D.D.S., and Dr. Thomas J. Krizek.

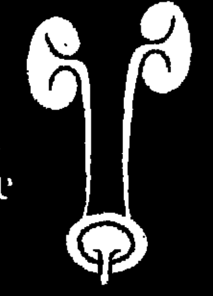
Ileal Bypass Reduces Fat Cells in Obese Male

Medical Tribune World Service

MEXICO CITY—A sharp reduction in the number of fat cells has been achieved by ileal bypass surgery in a grossly obese patient, the ninth International Congress of Nutrition learned here.

Dr. Donald B. Cheek, Professor of Pediatrics at Johns Hopkins University, reported that in a five-year follow-up the patient was found to have reduced adipose tissue mass, from 125 Kg. to 50 Kg., and to have lost half of his fat cell number. There was an over-all reduction of 100 Kg. of body weight.

Commenting on the report, Dr. George Bray, Professor of Medicine, Harbor Hospital Campus, University of California at Los Angeles, said: "Dr. Cheek's observation that the number of fat cells was decreased in a patient when weight loss was maintained for a prolonged period does provide room for cautious optimism."



One Man... and Medicine

ARTHUR M. SACKLER, M.D.,
International Publisher, Medical Tribune

Does Schizophrenia Protect Against Cancer?

DID YOU KNOW that if you have schizophrenia it may protect you against cancer, reduce the likelihood of your dying from coronary disease, and relieve you from the miseries of peptic ulcer, ulcerative colitis, and asthma? Who wants to make that deal? you may ask. But that isn't really the point.

Nature's Experiments

The fascinating element is nature's ongoing mass epidemiologic experiments. Our close study and definition of such "natural" phenomena could lead to advances on a wide range of medical fronts.

About 1945 we had first noticed a number of challenging findings, and at this time it might be interesting to focus in on one or two of these.

In the late '40s we noted the "exclusion" of certain somatic states in psychoses and the relation of psychic dysfunction to a range of physical disorders. My brothers and I then reported the following in a paper in the *Journal of Clinical and Experimental Psychopathology (Vol. XII, No. IV, 1951):*

"It may be of interest to record at this point that a survey of 1505 consecutive necropsies performed at Creedmoor State Hospital (1932 to 1949) revealed the following:

2 prostatic carcinoma
3 prostatic fibrosis
2 prostatic hyperplasia
12 breast carcinoma

Of these, none occurred among the 236 schizophrenics autopsied. Carcinoma of the breast was found in 1 involutional melancholic. The importance of this is emphasized by the fact that the schizophrenias constituted approximately 40 per cent of the hospital population in the years above mentioned. . . .

"In regard to the general problem of blood clotting and *in vivo* clotting as in coronary thrombosis and occlusion, it may be noted that the survey (referred to above) recorded 13 cases of coronary pathology. Of these, none occurred in schizophrenics."

Rarity of Cancer in Schizophrenia

These observations, relating to the rarity of carcinomas and fatal coronary occlusions among schizophrenics, suggested to us that in the schizophrenias we were dealing with metabolic processes, which processes seemed to exclude other metabolic disease. Those "excluded" or reduced in frequency were not just malignancies and coronaries. At that time we also remarked on the absence or rarity of peptic ulcer, ulcerative colitis, as well as asthma and other allergies in psychotic populations.

The international checkout: "Mental patients rarely suffer or die from malignant neoplasms"...4 vs. 15 per cent in one country, 6.9 vs. 20 per cent in another, 5 vs. 17 per cent in still another....

The other day an *International Mental Health Research Newsletter (Vol. 13, #4, 1971)* came to our attention. After collecting 15 years of data in a state hospital in Athens from patients with various forms of mental illness, the authors stated: "A recent inspection of these data revealed a startling finding made conspicuous by its absence. Mental patients rarely suffer or die from malignant neoplasms." Dr. Rassidakis and his co-workers then collected the data from another institution. Their pooled findings revealed that malignant neoplasms only caused death in 4 per cent of the mental hospital population as compared to 15 per cent in the general population. Checking this out with other countries, they found that in England and Wales malignant neoplasms accounted for 20 per cent in the general population and only 6.9 per cent in the psychiatric population. In Scotland the findings were 17 per cent and 5 per cent, respectively. In Moscow, the Kashenko Hospital reported that only 0.1 per cent to 0.2 per cent of schizophrenics died from malignant neoplasms in a population of 2,500 patients. Confirming our report of more than 20 years ago, the authors suggest that schizophrenics in particular may have even higher resistance to cancer than those suffering from other forms of mental illness.

Pertinent Findings Not Followed Up

When we had published our data, we had hoped that the infrequency or exclusion of malignancies and other metabolic states among schizophrenics (and other psychotics) provided vital clues indicating metabolic substrates for both malignant psychic and somatic states. Interestingly, the authors of the recent report raise the question, "Is it only incidental that LSD, sometimes associated with improvement in cancer patients, also produces a temporary schizophrenic-like state?" We don't know about the effects of LSD on malignant states but have published on the marked endocrine alterations (similar to those in schizophrenics) produced by the administration of LSD. Unfortunately, this latter series of investigations was terminated by the inability of our laboratory to obtain LSD for animal work because of Government regulations.

The Buried Discoveries of Medicine

The moral of these stories seems to be that medicine has accumulated a huge body of data which remains buried in the medical literature. Twenty years ago it was "obvious" to the "experts" that schizophrenia was a "mental disease." Previously, with the rising dominance of the psychoanalysts, the fundamental observations of Kraepelin in the 1890s, which gave somatic clues in "dementia praecox" as well as the classic observations of myxedema madness, were disregarded. We had hoped 20 years ago that our data then presented would initiate vital new approaches by other investigators. Who knows how many years have been lost in finding the solution to the problems of schizophrenia as well as malignancy.

Vagaries of Medical Fads

It is sad that medical progress is so subject to the vagaries of fads and fancies; that so many of the so-called leaders and official committees of medicine who accept papers for publications, set up meeting programs, and direct the expenditures of government monies for medical research are so subject to the popular fads of medicine and fancies of science holding sway. For how many needless years have patients with psychoses or malignancies been doomed to suffer for our failure to find alleviation or preventive measures which were really at hand?

EPIGRAMS—Clinical and Otherwise

I respect faith but doubt is what gets you an education.
—Wilson Mizner (1876-1933)

Emergence of New Respiratory Symptoms

Percentage of those without symptoms in 1961 who developed them during the study interval (seven years)

Symptom	Non-smokers (n = 559)	Continued smokers (n = 408)	Former smokers (n = 187)
Persistent cough	5.1	15.4	6.2
Persistent phlegm	8.0	16.7	8.4
Persistent cough and phlegm	3.9	11.0	6.3
Dyspnea	12.3	22.4	18.1
Wheeze	6.0	14.1	13.5

Data Show Chronic Bronchitis May Possibly Be Reversible

Continued from page 1

period, the investigator told the American College of Chest Physicians.

"The surprising finding," he declared, "is that even among those who continued to smoke, close to half of the men who had persistent symptoms in 1961 had recovered from them by 1968. Among nonsmokers and former smokers recovery rates are considerably greater, running between 60 and 85 per cent."

The unusual aspect of the study design, which drew on a population of white Chicago industrial workers aged 43 to 58, is that it was possible to resurvey the same group seven years later, Dr. Sharp noted. On the second survey, the team sought answers to four problems: the reversibility of persistent respiratory symptoms, rate of emergence of new symptoms of new disease, the change in spirometric indices of obstruction with the passage of time, and the relationship of smoking to symptom changes and spirometric changes.

The study population in the second survey included 559 nonsmokers, 408 smokers, and 187 former smokers.

Among the subjects who had stopped smoking, symptom prevalence was cut by half, Dr. Sharp said. This did not apply to dyspnea and wheeze, but when "symptom combinations, such as persistent cough and phlegm with dyspnea and wheeze were examined, again those who had stopped smoking had impressive reductions in prevalence," Dr. Sharp stated.

"It is clear from these data that the overall reductions in symptom prevalence in the second survey were due entirely to the changes in the group who stopped smoking," he continued. "These data indicate that while these respiratory symptoms may be persistent and chronic, they may still be reversible with cessation of smoking."

Among other highlights of the study were these: in men who had no respiratory symptoms on the first survey, about 60 per cent showed unchanged values seven years later, while "about equal numbers of the remaining 40 per cent showed improvement or worsening."

"Interestingly enough, however, even in the symptomatic groups 65 to 70 per cent of subjects still showed either unchanged or improved FEV_1 values," Dr. Sharp declared. "This was true [among many subjects] in whom one would not hesitate to make a diagnosis of chronic bronchitis."

Commenting on these findings, the investigator said: "Much of what has been published in the past 15 years on the epidemiology and natural history of chronic bronchitis would lead one to believe that by the time 'persistent' productive cough and spirometric signs of airway obstruction have appeared, chonic bronchitis is established and irreversible. Our data would suggest at the very least that this is not true of the population which we studied and possibly that it is not true of any population."

He noted that the accepted diagnostic criteria for chronic bronchitis are "the presence of cough and expectoration on most days, persisting for at least three months per year for two or more successive years."

"In our test population," Dr. Sharp continued, "chronic bronchitis as so defined was more often than not nonprogressive or reversible. We would ask how useful this conventional definition is if only a small and possibly unpredictable percentage of persons so identified actually develop disabling obstructive lung disease or if, alternatively, the definition selects the progressive chronic bronchitic in some populations (i.e., Londoners) but not in others (i.e., Chicagoans)."

He concluded that the accepted criteria are "too liberal, in the sense that they label as chronic bronchitics a large number of subjects who will never develop disabling obstructive pulmonary disease. . . . Clearly it would be useful to have more universally applicable criteria which would identify with more certainty the person who will develop progressive disabling disease."

Coauthors were Drs. Oglesby Paul, H. McKean, and W. Best.

Achilles Tendon Rupture Is Rebuilt Successfully With Use of Fascia Lata

Medical Tribune Report

DENVER—A method of repairing a rupture of the Achilles tendon using fascia lata, described as having yielded "excellent functional results," has been reported by Dr. Herbert R. Markheim of Denver.

The method has been utilized in athletes with complete rupture, as well as in cases where the rupture had gone unrecognized or the diagnosis had been delayed, Dr. Markheim said. Interest in the method came about following failure with primary suture. It was carried out in 13 cases.

He gave this account of the procedure:

"Surgery is performed with the patient in the prone position. A piece of fascia lata approximately 3 by 4 inches is removed from the thigh on the affected side. No attempt at closing the defect has been made in the more recent cases. The incision at the ankle is made in the posterior and lateral aspect along the margin of the tendon. Care is taken to avoid the sural nerve. The tendon is exposed and the ends can be seen to be frayed. The loose fragments of the tendon are trimmed and, with the foot in equinus, the ends of the tendon are brought together with loose chromic sutures.

"The undersurface of the tendon has been prepared by placing the fascia strip beneath it and two sutures are used to tack it distally and proximally beneath the tendon. The strip of fascia is then brought around and envelops the tendo Achillis, being sutured above and below and finally with sutures at the edge of the envelope or tube.

"Following closure of the wound the leg is placed in a long leg cast with the knee flexed and the foot in equinus. Immobilization usually for a period of four to six weeks has been satisfactory in our cases."

Coauthor was Dr. L. Levisohn.

The Only Independent Medical Newspaper in the U.S.

Medical Tribune

and Medical News
Published by Medical Tribune, Inc.

880 Third Avenue, New York, N.Y., 10022 • Telephone: 421-4000
Circulation audited by Business Publications Audit of Circulation, Inc.

Cop-Out

THE NATIONAL COUNCIL OF CHURCHES recently convened public hearings exploring the impact of advertising on drug-taking patterns of American society. To our absolute astonishment, a Federal Communications Commissioner at the hearings not only termed television "the principal pusher to a junkie nation." He said, "We've got a drug problem in America. It's called television."

That television constitutes a problem is comprehensible. That TV advertising may be dangerous is also comprehensible. What is incomprehensible is that while one official of a Government agency, FCC, points a finger of accusation, two other agencies, the Federal Trade Commission and the Food and Drug Administration, have failed to act where action has been indicated in this area of their responsibility. The FCC official stated it is "a very real danger that our current practice of self-medication through over-the-counter drugs is based on massive misinformation." If valid, that is an indictment which in good measure must be laid at the door of other Federal Agencies. His request that all broadcast advertising of all over-the-counter and all mood-altering drugs be banned is a dangerous as well as an unrealistic cop-out.

That TV advertising should be responsibly regulated goes without question. It is distressing to see and hear day in and day out the "funny" but potentially deadly "I can't b-e-l-i-e-v-e I a-t-e the *w-h-o-l-e* thing." Are government physicians unfamiliar with the fact that for many years in the past coronary deaths were listed on death certificates as due to acute indigestion? It is dangerous to have analgesics advertised in such a way as to encourage patients to defer visits to physicians in the presence of chronic headache. "Anacin did it again" is a clear appeal for chronic use—without regard for the fact that chronic headache is a presenting symptom in kidney disease, brain tumor, and hypertension—three potentially dangerous conditions where early diagnoses are imperative.

The Government has not permitted laxative advertising to laymen for "bellyaches" because the differential diagnosis could be acute appendicitis. It has been able to restrict the lay promotion of iron preparations. It is a mystery why action has been taken in these instances but not in respect to chronic headache or "acute indigestion." There is both law and precedent to control these abuses.

Any intelligent study of the health requirements of the public and the structure of the health care delivery system in the United States and abroad clearly indicates that there is and will continue to be an important function for valid self-medication under suitable controls. The dereliction of the FTC and other government agencies in their responsibility to the public should neither be obscured nor deferred by the inevitable bureaucratic request for more legislation. What is needed is action that can be taken in the present situation, not the passing of the buck and a cop-out.

Medical Declaration of Dependence

IT WAS REFRESHING to read a recent A.P. dispatch from London that the Law Commission of Great Britain, after due deliberation, has at last ruled that the "Taxation of Colonies Act is no longer of practical utility" and has therefore recommended repeal of the tax law imposed on the former American colonies. This extension of the olive branch follows by almost 150 years an expression of amity by Thomas Jefferson that at the time aroused the wrath of American men of medicine. Jefferson, by then an octogenarian, created the University of Virginia in Charlottesville in 1824, not only acting as architect for the university but appointing the entire faculty. In so doing, contrary to an earlier event in his career, he declared dependence on England, for almost all his faculty appointees were British. Notable among these appointments was the selection of Dr. Robley Dunglison to the professorship of medicine at the new medical school. The *Philadelphia Journal of the Medical Sciences* called on American medical societies to protest Dunglison's appointment as an act of discrimination and an injustice to American physicians.

What was unique and visionary about Dunglison's appointment, as so many other actions of Jefferson, is that his was the first full-time professorship of medicine in an American university. Professor Dunglison's contract restricted his practice outside the university to consultation, and his time was spent fully with medical students in the anatomy theater and at an outpatient teaching clinic he conducted after his lectures. Dunglison became known as father of American physiology following publication in 1832 of his text *Human Physiology*, which he revised through seven editions. He went on from the University of Virginia to the University of Maryland in Baltimore and then, in 1836, to the chair of medicine at Jefferson Medical College. Here he had a long and distinguished career. Until his retirement in 1868 he was a leader in giving Philadelphia its pre-eminent position in medicine in the 19th century.

R.S.O.

Reversibility of Chronic Bronchitis

CLINICAL QUOTE: *"We believe that the points of importance in this study are those observations which suggest reversibility in the symptoms and airway obstructive phenomena of chronic bronchitis. Predictably, cessation of cigarette smoking impressively increased this tendency toward reversibility."* (Dr. John T. Sharp, Professor of Medicine, University of Illinois, and colleagues at the American College of Chest Physicians meeting, Denver; see page 1.)

"I'm sorry—but I no longer make house calls."

LETTERS TO TRIBUNE

A Clarification

Editor, MEDICAL TRIBUNE:

Thank you for sending me the November 15 issue of MEDICAL TRIBUNE, which presented a review of an article by Drs. Irving Karten, Mathew Lee, and myself under the caption "Team Approach to Rheumatoid Arthritis." The term "three-man team" used in the first paragraph was an unfortunate choice of words, since it might give the impression that this was the team referred to in the title. The three physicians were, of course, the authors of the study, and the *team* naturally included them, but most importantly there were also the physical therapist, occupational therapist, social worker, public health nurse, ward nurses, and physical therapy assistant who worked intimately with these patients, as well as a consultant group of rheumatologists, orthopedist, physiatrist, and psychologist who met monthly to consider specific problems.

CURRIER MCEWEN, M.D.
South Harpswell, Me.

Full-Time Professor

Editor, MEDICAL TRIBUNE:

Dr. Arthur Master's recent editorial, "The Full-Time Professor?", touches the tender nerve of interpersonal relationships between part-time and full-time physicians, a widely recognized, greatly discussed, but rarely so skillfully presented problem.

Many part-time medical and hospital school staff members (euphemistically called "volunteers" when they are unpaid) prefer to march to the beat of different drummers rather than to the baton of one person. Creative people are often trapped by this fallacy of full- versus part-time teachers. A recent example occurred when the publisher of a book which lists scientists in the U.S. invited me to complete his questionnaire. One question was "What per cent of your time is spent in research and teaching?" Innocently, I estimated 30 per cent, basing the estimate on a 70-80 hour work week, rather than on a standard 40-hour week, during which I see patients, teach, research, write, and edit. When my name was not included, I inquired and learned that the requirement for listing of practitioners was that they spend 50 per cent or more of their time in teaching and research. Fifty per cent of a 40-hour work week is 20 hours, actually *less* than 30 per cent of my customary 70-80-hour work week.

There is a growing tendency to appraise a physician's services, practice time, and even thinking by the industrial process of cost analysis. However, worth analysis, as Chester Karass points out in *The Negotiating Game*, is a far more valuable and equitable method of evaluating the contributions and services of doctors. It is high time that economic medical experts adopt worth analysis rather than cost analysis in analyzing medical values.

RAYMOND HARRIS, M.D.
President,
Center for the Study of Aging, Inc.
Albany, N.Y.

Neurologic Surgery

Editor, MEDICAL TRIBUNE:

The method of "telethermocoagulation" to produce therapeutic lesions within the brain or pituitary ("What's new in neurologic surgery?"—October 30) involves direct implantation of a metallic seed whereby local heat of imprecise control is induced via external RF waves of special type. It has been developed in animals but cannot yet be regarded as safe or as effective as the stereo-RF probe technique devised by Dr. N. T. Zervas (Beth Israel Hospital, Boston) and performed to date on well over 50 patients with excellent results and minimum mortality/morbidity.

H. HAMLIN, M.D.
Neurosurgical Clinic
Massachusetts General Hospital

Manpower "Present"

Editor, MEDICAL TRIBUNE:

I share Dr. Shire's concern that trauma research is poorly funded and often seen as a "stepchild" in terms of interest and support (MEDICAL TRIBUNE, November 15), and I was surprised that he did not even mention the emergency physician and the eight current training programs in this still unrecognized specialty.

The emergency physician is the one who is there as the patient is wheeled into the hospital emergency area. It is he who must recognize and respond to the acute pathophysiology. Many physicians and surgeons have chosen emergency medicine as a career and have clearly demonstrated their interest, though they may require additional education and training to provide the best emergency care.

Dr. Shires is not alone in his awareness that physicians who care for the severely injured patient require special training. The same holds true for the patient with an acute medical emergency. The ability to make rapid correct decisions in emergency situations is one which must be developed through experience and training.

It would seem wasteful to search elsewhere for surgeons interested in trauma (a difficult search) while neglecting the emergency physician, who starts out with the essential first qualification. He is physically present.

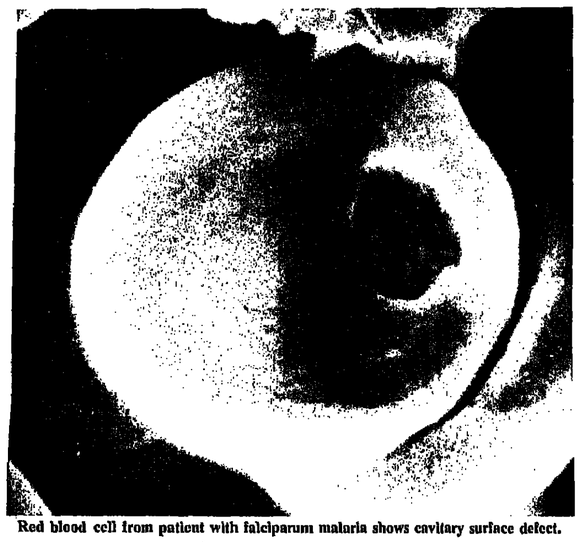
GEORGE R. SCHWARTZ, M.D.
Emergency Medicine Program
Medical College of Pennsylvania

Team Studies Malaria Parasite's Destruction of Red

TO BETTER UNDERSTAND the process by which the malarial parasite Plasmodium falciparum destroys human red blood cells, surface and internal anatomies of erythrocytes were examined by scanning electron microscopy at the University of Missouri by Drs. Stanley P. Balcerzac, John D. Arnold, and Daniel C. Martin.

Their findings show that in parasitized cells, part of the invading organism is associated with a highly irregular surface defect, while the bulk of the parasite is located immediately below the irregularity and extends under the smooth red cell surface. Many nonparasitized cells have cavitary surface defects, suggesting that they once contained parasites.

The abnormalities observed offer possible explanations for premature destruction of red cells by two basic mechanisms—the trapping of the parasitized cells in the reticuloendothelial system and the removal of the parasites by the spleen. The splenic pitting might create increased osmotic fragility and susceptibility to destruction in vivo.



Red blood cell from patient with falciparum malaria shows cavitary surface defect.

Red blood cell of a mouse with the parasite Plasmodium surface defects similar to those occurring in different sp

Here the surface of the icebergllke Plasmodium falciparum parasite is raised above that of the human red blood cell, showing a sharp demarcation between the parasite and host.

Grant Given to Program To Train Med Students In Northwestern States

THE UNIVERSITY OF WASHINGTON School of Medicine, Seattle, the only medical school in the four-state WAMI region, has been awarded a $1,500,000 NIH contract to provide instruction at the University of Alaska, Montana State University, University of Idaho, and Washington State University.

Students in the WAMI project receive the first year of a three-year education at any one of the four schools. Remaining study includes clinical instruction at the University of Washington and at community clinical units established in a dozen rural areas staffed by local physicians with faculty status at University of Washington.

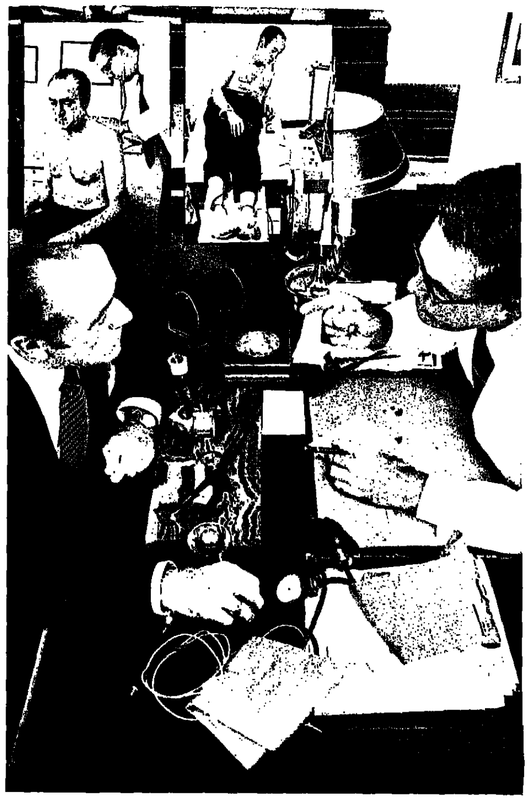
The WAMI-area ratio of physicians to residents is well below the national average of 150/100,000, says University of Washington dean Dr. Robert L. Van Citters, standing at far right with Dr. Jon Lindsay, Professor of Microanatomy, and first-year students. The goal of the WAMI project is to provide Northwestern states' large rural areas with more comprehensive health care.

The psychotherapeutic effect of Oral Valium® (diazepam)

in anxiety and somatic symptoms of excessive psychic tension

When a complete examination rules out organic disease, you may find that functional complaints involving the heart, stomach or colon—frequently seen in anxious patients overreacting to stress—are a result of excessive psychic tension. And if counseling alone does not suffice, you might consider Valium (diazepam) to help relieve these tension-induced symptoms. In general, it goes to work promptly, usually producing significant improvement within the first few days of therapy, although some patients may take longer to show a clear-cut response.

Available in three convenient tablet strengths—2 mg, 5 mg, 10 mg—Valium provides dosage flexibility for maximum patient benefit with a typical *t.i.d.* or *q.i.d.* regimen.



in anxiety with or without associated depressive symptoms in psychoneurotics

Valium (diazepam) can provide prompt relief when excessive anxiety and undue tension are a prominent part of the clinical picture. By relieving these symptoms, it can enhance response to therapy and add to the effectiveness of your total management of the psychoneurotic patient. Caution patients against driving or engaging in hazardous activities during therapy.

The recommended dosage is 2 to 10 mg, *b.i.d.* to *q.i.d.*, depending upon the severity of symptoms.

adjunctively in organic disorders complicated by undue psychic tension

Overly tense patients—particularly those with G.I. or cardiac disease—must be kept calm when undue tension and excessive anxiety aggravate their condition and interfere with therapy. Oral Valium can provide the desired response, generally without significantly adversely affecting respiratory, pulse or heart rates. It is used with most classes of primary medications such as cardiac glycosides, diuretics, vasodilators, anticholinergics and antacids, and is usually well tolerated; the most frequent side effects are drowsiness, fatigue and ataxia.

When nighttime anxiety precludes sleep, an *h.s.* dose added to the *t.i.d.* regimen can relieve the anxiety.

Please see the last page of this advertisement for complete prescribing information.

The psychotherapeutic effect of Injectable Valium® (diazepam)

prior to surgery

Injectable Valium (diazepam) can promptly calm the surgical patient by lessening the excessive anxiety and undue tension that may be associated with strange surroundings and disturbing procedures. And it can provide the added advantage of markedly diminishing recall of preoperative procedures.

The recommended dosage is 10 mg, I.M., administered one to two hours preoperatively. Injectable Valium should not be mixed or diluted with other drugs, solutions or fluids.

adjunctively prior to gastroscopy and esophagoscopy

Injectable Valium (diazepam) can be a valuable adjunct in allaying excessive anxiety when it accompanies such procedures. It calms the anxiety yet allows the patient to cooperate by responding to commands and following instructions. It is not recommended for bronchoscopy and laryngoscopy. Because of the possibility of laryngospasm, necessary countermeasures and resuscitative facilities should be immediately available.

Half an hour before gastroscopy or esophagoscopy, a 5 to 10-mg dose is administered I.M. or I.V.

prior to cardioversion

Through relief of undue anxiety and excessive tension, Injectable Valium (diazepam) can effectively calm the patient. Memory of the cardioversion procedure can be markedly diminished. Injectable Valium seldom significantly alters vital signs. Nevertheless, there have been infrequent reports of hypotension and rare reports of apnea and cardiac arrest. Resuscitative facilities should be immediately available.

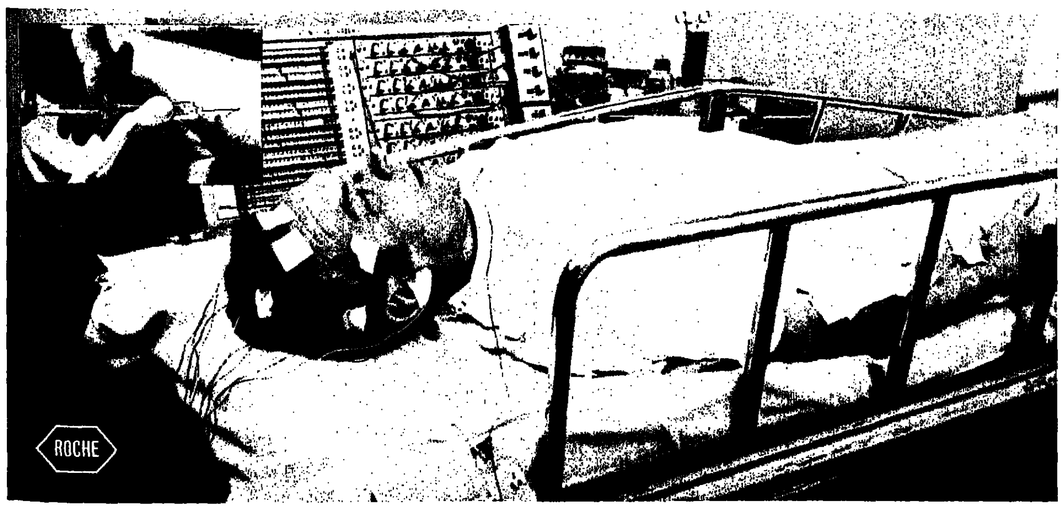
Five to ten minutes before elective cardioversion, the recommended dosage is 5 to 15 mg, injected slowly I.V. (5 mg/min).

The anticonvulsant effect of Valium® (diazepam)

adjunctively in certain convulsive disorders

Injectable Valium (diazepam) has usually been an effective adjunct in interrupting status epilepticus promptly, sometimes in a matter of seconds. It has helped provide control with the first injection, frequently with prolonged relief. Oral Valium may be used adjunctively in certain convulsive disorders such as petit mal or myoclonic seizures, although it has not proved useful as sole therapy.

In status epilepticus and severe recurrent convulsive seizures, 5 to 10 mg, injected slowly I.V.—5 mg (1 ml)/minute. Use I.M. route if slow I.V. injection is not feasible. Do not mix or dilute with other drugs, solutions or fluids. Repeat in 2 to 4 hours, if necessary. The dosage for Oral Valium used adjunctively is 2 to 10 mg, 3 or 4 times a day.



Please see the last page of this advertisement for complete prescribing information.

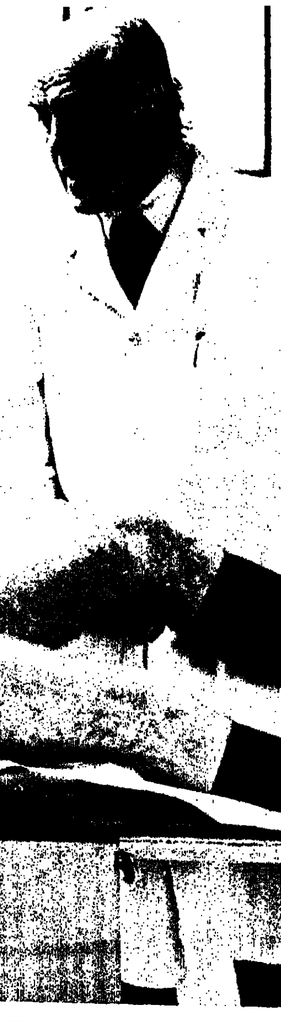
The skeletal muscle relaxant effect of Valium® (diazepam)

adjunctively in skeletal muscle spasm caused by local pathology

As part of the therapeutic regimen, Valium (diazepam) orally or parenterally, as appropriate, can help relieve skeletal muscle spasm due to reflex spasm caused by local pathology, such as inflammation of muscles or joints, or associated with muscle strains. It can help break the spasm/pain/spasm cycle and thus may increase mobility.

Usual oral dosage is 2 to 10 mg on a *t.i.d.* or *q.i.d.* schedule.

Usual injectable dosage is 5 to 10 mg I.M. or I.V. initially, then 5 to 10 mg in 3 to 4 hours, if necessary. In elderly or debilitated patients, it is recommended that oral dosage be limited to the smallest effective amount to preclude the development of ataxia or oversedation (2 to 2½ mg once or twice daily, initially, to be increased gradually as needed and tolerated).



For three different effects:
psychotherapeutic
anticonvulsant
skeletal muscle relaxant

Valium® (diazepam) ROCHE

adjunctively in spasticity associated with paraplegia

In upper motor neuron disorders causing paraplegia, the adjunctive use of Valium (diazepam) can help reduce skeletal muscle spasticity. Valium offers a wide margin of safety due to its relatively low toxicity. Isolated reports of neutropenia and jaundice make periodic blood counts and liver function tests advisable during long-term therapy.

Three convenient tablet strengths—2 mg, 5 mg, 10 mg—allow wide adjustments in dosage for the greatest efficacy in clinical response. And Injectable Valium may be used, where appropriate, in the usual dosage for muscle spasm.

adjunctively in spasticity due to cerebral palsy or athetosis

The skeletal muscle relaxant effect of Valium (diazepam) makes it a valuable adjunct in reducing spasticity. It may thus aid by reducing involuntary movements and improving voluntary performance and speech. This may result in more patient cooperation and confidence during therapy. Valium is generally well tolerated; drowsiness has been the biggest problem among responsive athetoid children. The possible side effect of ataxia may limit its usefulness in ataxic children.

Dosage should be individualized for maximum patient benefit. However, the usual recommendation is 2 to 10 mg *t.i.d.* or *q.i.d.* Where parenteral therapy is indicated, use 5 to 10 mg I.M. or I.V. initially, then 5 to 10 mg in 3 to 4 hours, if necessary. Oral Valium is contraindicated in children under 6 months. Injectable Valium is contraindicated in infants and its safety and efficacy in children under 12 have not been established.

parenterally in stiff-man syndrome or in tetanus

Injectable Valium (diazepam), used adjunctively, can reduce characteristic skeletal muscle spasm and resulting rigidity. Response is usually prompt and improvement sustained in the control of muscular rigidity and convulsive spasms. In general, Valium can thus help improve range of mobility. Periodic blood counts and liver function tests are advisable during long-term therapy. Only the parenteral form of Valium (diazepam) is indicated for tetanus. Usual I.M. or I.V. dosage recommendation is 5 to 10 mg; for tetanus, larger doses may be required. A repeat dose, if necessary, may be administered in 3 to 4 hours.

Please see the following page for complete prescribing information.

...ells

...l shows
...malaria.

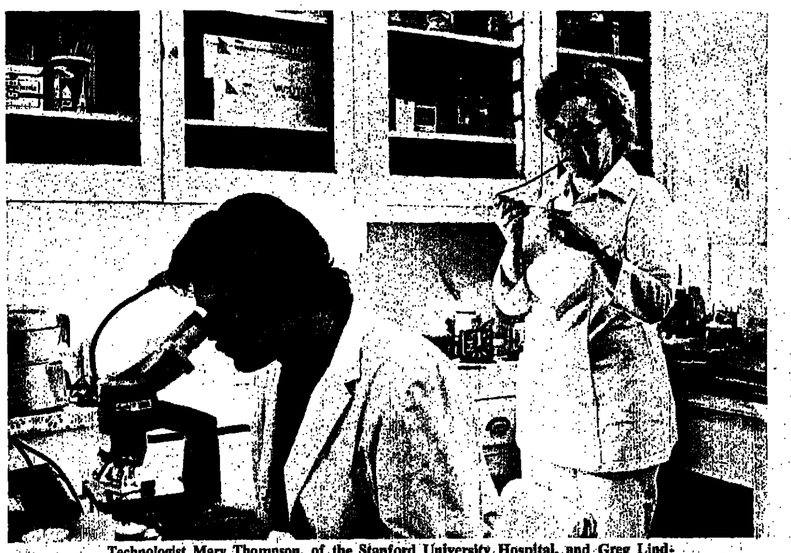
White plague: The World Health Organization states that there are 2,000,000 active cases of infectious TB in India. Surprisingly only 5 per cent of the victims are unaware of any symptoms. In rural areas diagnosis, treatment, and prevention through a well-organized nationwide program bring the elimination of TB closer.

Volunteers Staff a Calif. Community Clinic

The Gardner district of San Jose, Calif., has a population of 20,000, nearly all of whom are poor, undernourished, undereducated, in need of health care, and cut off from standard medical facilities by barriers of language (two-thirds of the population is Chicano), money, and transportation. The solution for better community health lay in the establishment of a community-run clinic. A community board of directors composed of seven delegates from local organizations, a physician from the Santa Clara County Medical Society, and a private dentist organized the Gardner Community Health Center as a nonprofit organization in December, 1971.

Services are free, with medical care provided by a volunteer staff of residents and interns from Stanford Hospital, private physicians, fourth- and fifth-year Stanford University medical students and nursing students from Stanford and C.S.U. at San Jose. Technologists from Stanford Hospital and premed students from San Jose man the lab, and community residents volunteer as workers.

A young Gardner inhabitant with an abdominal pain is examined by Dr. Michael Spector, resident at Stanford Hospital. Dr. Spector is one of the many physicians and students who volunteer their services to the health center.



Technologist Mary Thompson, of the Stanford University Hospital, and Greg Lindholm, a premed student at California State U. at San Jose, working in Health Center lab.

Ultrasonic Study Advised During Craniotomy

Medical Tribune Report

PHILADELPHIA—Bone presents the major limiting factor in the conventional use of echoencephalography, and therefore ultrasonic investigations during craniotomy are desirable, investigators from Buffalo, N.Y., reported here on the basis of their five-year experience in a selective group of 90 patients.

The procedure is useful in the selection of the appropriate operative site on the dominant hemisphere and as an aid in the diagnosis of such diseases as primary brain tumor, metastatic brain tumor, intracerebral hematoma, and intracerebral abscess, they told the 17th annual meeting of the American Institute of Ultrasound in Medicine.

"Transdural echoencephalography may also prove helpful in the search for foreign bodies, included embedded bone fragments, and in the guidance of a biopsy or ventricular needle," said Dr. Reinhold E. Schlagenhauff, Associate Professor of Neurology at State University of New York at Buffalo School of Medicine, who reported for the group.

Echoencephalographic exploration during surgery was carried out, he said, after elevation of the bone flap or trephination, usually transdurally but on a few occasions directly on the cerebral cortex. The procedure, he noted, takes about 10 minutes to perform.

The transducer, he explained, is lightly applied to the dura or the brain surface, and during gentle rocking movements the ultrasonic reflections are observed and photographed on Polaroid film. "The operative field is systematically studied in this manner in multiple sites, an average of six to 12 probings."

Provide Additional Information

Noting that refined radiologic examinations produce quite accurate preoperative knowledge of the site and extent of intracranial mass lesions, Dr. Schlagenhauff said, however, that "intraoperative ultrasound evaluations can provide additional information as to the depth and extent of an intracranial tumor and aid in the localization of intracranial hemorrhage or abscess."

"An aspiration needle," he continued, "may be inserted at an established point where the hematoma appears nearest to the surface, and single or multiloculated abscesses may also be recognized by this method. This advantage seems especially valuable in the presence of marked increased intracranial pressure."

In operations on the dominant hemisphere, he declared, ultrasonic mapping may help in selecting the cortical incision closest to the underlying tumor "and prevents unnecessary and potentially hazardous intracerebral exploration, thus preserving valuable brain tissue."

Although the transdural echoencephalographic technique minimizes the possibility of manipulative trauma or contact infection, Dr. Schlagenhauff said, cortical application of the transducer has not resulted in subpial hemorrhage.

"Most of our operative probings," he said, "have been carried out transdurally, since we have found no significant difference in the results obtained from transdural compared to direct cortical probings. However, the amplitude of the echoes received from cortical probings is probably higher."

He said that no significant wound infections attributed to the ultrasonic probing were observed in their series of patients.

Coauthors were Dr. Franz E. Glasauer, Jack Napoli, and Carol Schultz.

Editorial Capsules

...brief summaries of editorials or guest editorials in current medical journals.

Curing Versus Healing

"Can we 'heal' man without 'curing' the disease? Well, if the 'disease' is a gangrenous limb and we amputate it, then the man feels depressed and deprived. But if he adjusts healthily to a useful new prosthesis, then, in a sense we have 'healed' the total person from his sense of disability, but we have not cured the gangrene, except in the whimsical sense of having amputated the whole organ. Our new medical and surgical technologies have improved our skill and success in 'curing' diseases, but the more subtle problem of healing the person who feels sick or ill, is not so much a technological problem as one of making a person feel better even though diseased tissue remains.

"In a sense then, the more skilled we become technologically, the more atrophied our emotional skills as 'healers.' In the various criticisms of the physician, this is, perhaps, the number one doubt—the complaint that we don't give enough time or compassion to the person who doesn't feel right. One wonders what has become of the healer, who responding to a cry for help, used to say: 'I'll be right over.'" Editorial. *(J. Med. Soc. N.J. 69:11, November, 1972.)*

Apoplexy Research

Cerebral apoplexy is the third most frequent cause of death in the rich countries of the world and an even greater cause of prolonged serious disability. About one-third of all apoplexy cases have their direct or indirect cause in vascular diseases in the extracerebral vessels of the brain. What a challenge to surgery! Nor has the challenge gone unaccepted. **Apoplexy research is today one of the clearest examples of the current problematics of medical science.** It forces us to revise both our anatomic and physiologic dogmas concerning the brain as such. It forces us to study the brain as an integrated part of the organism's collective function. It forces us into completely basic biochemical and physiologic studies, far removed from the clinical plane. Through our therapeutic insufficiency in this area, we are unintentionally confronted with the enormous humanitarian, sociologic, and economic consequences of the problem. Erik Skinhoj, editorial. *(Ugesk. laeger [J. Danish M. A.] 134:43, October 23, 1972.)*

'Mass Produced' Education

Are the Scandinavian countries heading toward a "mass production" education of doctors? Opinions expressed at a recent round-table discussion seem to indicate this, even though the situation varies considerably from one country to another. Nevertheless, three facts seem to apply to all Scandinavian countries. One, there is a need for an organization that can coordinate basic, specialist, and postgraduate medical education. Second, guidance of doctors undergoing clinical training is neglected. Third, in view of the explosive increase in the number of basically trained new doctors, there is a risk of waiting lists in the final phase of the education. Editorial. *(Nord. Med., 87:8, October, 1972.)*

Hospital Administration

Hospital patients throughout the country will in the future, receive better **information about who is responsible for hospital administration and how these administrators and responsible politicians may be reached.** The Association of Swedish Country Councils is planning a patient brochure specifying all the information that ought to be provided all newly admitted patients. It is to be hoped that this brochure will also contain additional local information specific to the hospital in question. Editorial. *(Läkartidningen [J. Swedish M. A.] 69:40, September 27, 1972.)*

NIH Asked to Start Assessing Manpower Need

Medical Tribune Report

WASHINGTON—The National Institutes of Health has been advised by the General Accounting Office to get on with detailed assessments of manpower needs in the health professions in which education has been supported by Federal funds.

Clear projections and priorities are still lacking more than five years after the start of Federal contributions to medical, dental, and other health professionsschools for the support of teaching activities, the GAO declared in a report on NIH activities.

The report said that through July, 1971, $373,600,000 was given to health professions schools for support of instructional activities. Eighty-four per cent went to schools of medicine and dentistry and the remainder to schools of pharmacy, optometry, osteopathy, podiatry, and veterinary medicine. Medical schools received $224,400,000—$109,000,000 in institutional grants and $115,400,000 for special projects, including construction of teaching facilities.

Federal programs have resulted in increased enrollments of medical students and in curriculum improvements during the five years reviewed, the GAO said. Entering medical students numbered 8,759 in 88 schools in 1965 and 11,348 in 103 schools in 1970, for an increase of 30 per cent. The watchdog agency observed, however, that 25 per cent of physicians licensed in this country in the five years were graduates of foreign medical schools.

Besides criticizing the NIH and its Bureau of Health Manpower Education for not establishing firm projections and relating its funding programs to them, the GAO also found fault with the schools for inadequate accountability of expenditures. Most of the funds went for salaries, but GAO investigators were not able to determine in six medical and six dental schools studied how much of the time of faculty members paid from teaching support programs was actually spent in instructional activities.

The GAO also urged NIH to move ahead on studies of the effects of population growth and migration on the needs for health personnel, along with plans to effect a redistribution of health workers. Determination of optimal physician-population ratios and plans to expand the uses of paraprofessional health workers were also requested by the Congressional review agency.

In its response, the Department of Health, Education, and Welfare commented that BHME was already working with professional associations and school groups to make the determinations and estimates sought by GAO. The department noted that it is now awaiting a study on costs of health manpower to be completed in 1973 by the National Academy of Sciences.

The GAO report covered the administration of programs authorized by the health manpower acts of 1965 and 1968, but not the new, expanded initiatives authorized by the 1971 act. The two earlier programs authorized $485,000,000, of which $388,000,000 was appropriated and $373,600,000 was actually spent by health schools.

Medical Records Degree

BIRMINGHAM, ALA.—A bachelor's degree program in medical records administration has been announced at the University of Alabama in Birmingham.

Dr. Keith Blayney, dean of the School of Community and Allied Health Resources, said that a five-year grant of $239,522 from the Bureau of Health Manpower has made it possible to start the program.

Cerebral Thrombosis

NASHVILLE, TENN.—Mixed conjugated estrogen in conjunction with a vasodilator—usually papaverine of some type—was recommended as therapy for cerebral thrombosis and as a means for preventing it by Dr. C. C. McClure, Jr., of this city.

The regimen has been used in more than 300 patients, he reported in *Clinical Medicine*, in a study covering a subgroup of 87 patients on whom there was a five-year follow-up. Of these, three discontinued estrogen and two had recurrent thrombosis within six months. There were two instances of recurrent thrombosis among the remaining 84 patients, both occurring in patients with polycythemia.

"In almost 100 per cent of the patients the symptoms were definitely improved," Dr. McClure said. It was determined by ophthalmoscopic examination that retinal arteries were increased in size from 20 to 30 per cent.

Drug Addiction Withdrawal

WINNIPEG, MAN.—Drug addiction withdrawal symptoms could be ameliorated by choline treatment, work by Canadian investigators suggests.

Their animal studies earlier indicated that opiates impair the release of acetylcholine at peripheral and brain sites. Dr. Carl Pinsky, of the Department of Pharmacology and Therapeutics, University of Manitoba, theorized that when morphine is withheld, acetylcholine floods out from central and peripheral cholinergic terminals into supersensitive receptors.

In a new study, the investigators habituated rats to morphine sulfate, increasing twice-daily doses over 35 days. Either choline chloride or normal saline was administered with the last dose of morphine and alone twice daily for three days.

The treatment diminished the intensity of withdrawal, the report said. The choline-treated rats had less weight loss and normal grooming and appeared healthy, in contrast to saline-fed controls.

The team, including Dr. J. W. Phillis, A. J. Vasquez, and K. Jhamandas, later duplicated these results in other species.

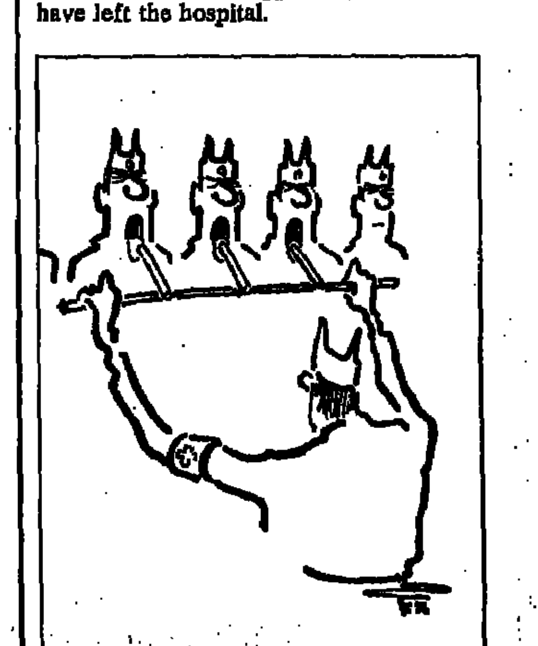
Radiation for Glioblastoma

TOKYO—A radiation method using a Japanese-developed sensitizing drug is said to have produced apparent cures in glioblastoma cases.

Investigators in the neurosurgery department of Tokyo University report that the normal 5,000-r dosage of cobalt^{60} irradiation necessary for treating brain tumors could be cut by half.

The sensitizer was identified as shodomycin, an anticarcinogenic drug developed by an Osaka pharmaceutical company.

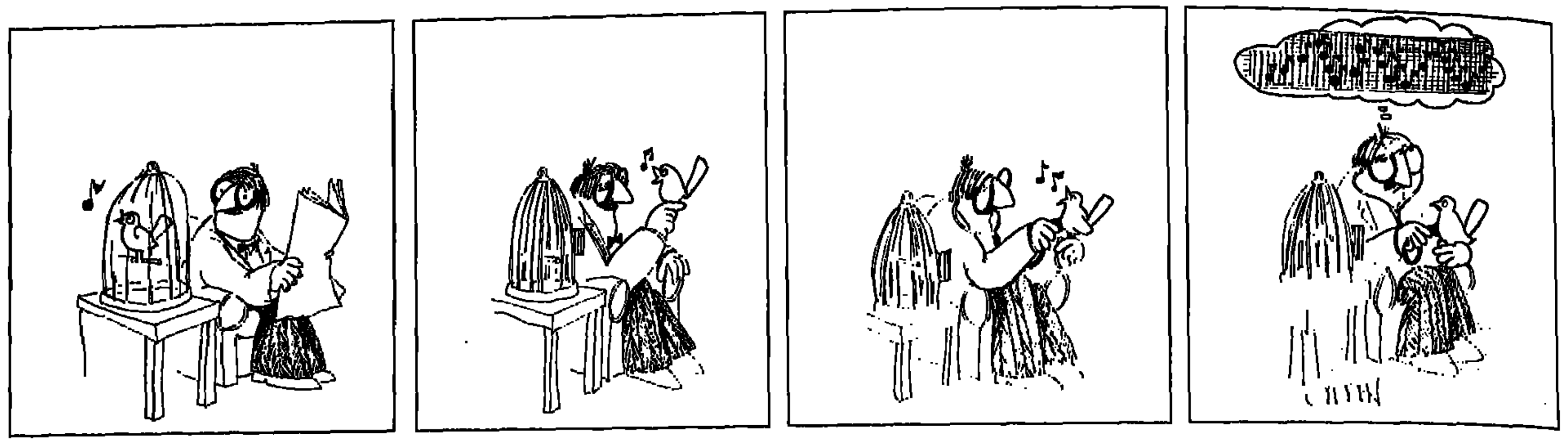
After laboratory tests on mice, the team used shodomycin in cobalt treatment of four patients with glioblastoma. One died, but three are now apparently cured and have left the hospital.



©1972 Medical Tribune

Clinical Trials

by Oldden



Round Table Devoted to Ischemic Heart Ills

Continued from page 1

One of the targets in such prevention would be the "risk factors" that are associated with heart disease, but the meeting was warned that many of the trials designed to test the validity of these factors are open to scientific challenge. Dr. Oliver, have the standard risk factors become a kind of mythology that should be dethroned?

Dr. Oliver: This is an extremely important and difficult question. It is of concern to me because many people who approach the problem of risk factors do so too glibly. There is a tendency to accept certain facts uncritically because we have to have something to hold on to.

M.T.: Should the risk factors therefore be submitted to reclassification?

Dr. Oliver: I would put it another way. The positive correlation between hypercholesterolemia (rather than any other form of hyperlipidemia)hypertension, and excessive cigarette smoking with ischemic heart disease in developed countries cannot be challenged. It can also be shown that when these risk factors coexist the result is not an arithmetic but a geometric progression in incidence. But it does not follow that by controlling one or all of these you can control ischemic heart disease. It is a very complex disease, and a sizable proportion of cases cannot be explained on the existence of risk factors.

M.T.: So we need to pursue more research in this area?

Dr. Oliver: It seems clear that there are additional components involved which we are incapable of measuring at the present moment, and until we can identify it we should not be surprised if we cannot completely control ischemic heart disease.

Dr. Fejfar: You might qualify that by adding that for the same level of risk factors there appear to be different prognostic values in different communities. Certain factors, for example, have a more significant prognostic value in the United States than in Europe. But at present we cannot explain more than 50 per cent of cases on the basis of known risk factors.

M.T.: To come back again to the risk factors per se, I notice, Dr. Oliver, that you made no reference to physical inactivity in the list you have just enumerated. Was this deliberate?

Dr. Oliver: Yes. I do not find the evidence concerning physical inactivity—at any rate, up to the present meeting—as convincing as for the other three risk factors. Physical activity, or lack of it, is of course important—there is no question of that. But discriminant function analyses show that physical inactivity has less influence in the disease than the others. This may be because of inadequate "weighting" due, for example, to our inability to score leisure activity.

Dr. Fejfar: I would disagree with you—a number of papers have been published showing that physical inactivity has the highest prognostic significance.

Dr. Renold: What about blood sugar?

Dr. Oliver: The Tecumseh study shows that this is the most important risk factor of all.

Dr. Renold: Framingham also, but there it is more important in large artery disease than in coronary disease.

M.T.: Since we are on the subject of Framingham, Dr. Oliver, do you consider that it suffers from the kind of experimental design problems to which you referred in your review of trials at the meeting?

Dr. Oliver: Let me say at once that the Framingham study was magnificent. In fact, what we are talking about round this table would be impossible without it. So any minor criticisms are really rather carping. Today we would set it up differently, on the basis of advances in our own understanding of the disease, and there are problems in design and data collection, but these are minor in relation to its yield.

M.T.: To return from this point, I would invite Dr. Renold to comment on the significance of diabetes among risk factors.

Dr. Renold: It is clearly involved in a number of the other variables, less so perhaps in hypercholesterolemia but certainly in hypertriglyceridemia and obesity. But there is much more interrelationship than with some of the other factors, and at times it is difficult to hold them apart.

Dr. Beaumont: It should also be kept in mind that increasing age tends to assume importance in regard to persons with an accumulation of comparatively minor risk factors.

Dr. Nikkila: Yes, one important risk factor is time. On the one hand, relatively weak risk factors associated with a long period of time can lead to the disease. Conversely, the disease can result from the presence of a strong risk factor over a short period of time.

Dr. Oliver: But keep in mind that there is an inverse age weighting with at least two of the risk factors. Cigarette smoking and hypercholesterolemia are more important in men aged 35-45 than men aged 55 or more.

M.T.: Is any distinction to be drawn between the prognostic value of the risk factors we have been discussing before and after the first heart attack?

Dr. Fejfar: The question I would ask in that context is whether the prognostic value is really different or whether it is simply overridden by the much higher risk of getting another infarction.

Dr. Oliver: It may well be shown in the next five years, and together with what we have learned in the last 10, that control after infarction of those risk factors not related to hypercoagulability is a waste of time. The weighting of the standard risk factors is far less after infarction, probably because we have another set coming in. The fact, for example, that the myocardium is no longer contracting efficiently may be far more important than hypercholesterolemia.

M.T.: Or the occurrence of arrhythmias?

Dr. Oliver: That, too, of course.

Dr. Nikkila: But we are dealing with another disease. In primary prevention you are concerned with arterial disease, and in secondary prevention it is myocardial.

Dr. Oliver: Yes, I agree and would go so far as to say that many secondary prevention trials are conceptually unsound, because they are not controlling the factors that are operative after infarction.

Dr. Janushkevicius: It is also important that we should scrutinize the feedbacks between the changing types of risk factor in all stages of ischemic heart disease and the effectiveness of preventive measures.

M.T.: Can we now move from the area of risk factors to discuss the factors that appear to protect from ischemic heart disease? What are the genetic, ethnic, or sexual factors involved?

Dr. Oliver: Yes. Sitting around this table we have a group of men who are of middle age or older, and coronary atherosclerosis would show up on the angiogram of each one of us. Yet we will not necessarily develop ischemic heart disease. Why we all do not is a really important question.

Dr. Beaumont: To answer this, we have to study mechanisms. In other words, we should not ask: Why do men tend to get ischemic heart disease, and not women? But, rather: Why is it that women are less subject to the disease?

Dr. Fejfar: This brings up the question of epidemiological studies as well. There is a project, coordinated by WHO, in which autopsy specimens have been collected by centers in Prague and Malmö, Sweden, and three areas of the U.S.S.R. and compared. Quantitatively measured, there is very little difference in the levels of atherosclerosis found for the younger age groups. Yet there is twice as much ischemic heart disease for the age groups in question in Prague as in Sweden.

Again, there is not a great difference in the prevalence of atherosclerosis between east and west Finland, but the incidence of ischemic heart disease, and the fatality rate, is higher in the east than in the west. So, as Morris postulated 20 years ago, it may be that arterial disease remains arterial disease until factor X or Y or Z comes along and triggers a sequence leading to a myocardial event.

Medical Tribune's report of this international round-table discussion will continue in its next issue.

Gets Psychiatric Award

The 1973 Taylor Manor Hospital Psychiatric Award will be presented to Dr. Jacques S. Gottlieb of Detroit at the fifth annual symposium to be hosted by the hospital. "Schizophrenia Around the World" is the theme of the symposium. This year Dr. Gottlieb and associates isolated and partially identified enzyme whose absence from brain may produce schizophrenia symptoms.

Silicone-Gel Prosthesis Cuts Incontinence After Surgery

Continued from page 1

the 66th annual meeting of the Southern Medical Association.

Thirteen of the 21 patients, he reported, had excellent results. Noting that four of the 13 had previously had unsuccessful anti-incontinence surgery, he said that "if only 'new' cases are considered, the cure rate with the silicone-gel prosthesis operation was 70 per cent."

Dr. Kaufman noted that, in his experience with other procedures, excellent results were obtained in 32 per cent of patients in whom the crura of the penis were crossed in the perineum to provide compression of the urethral bulb and in 45 per cent of those undergoing a modification of that procedure.

The silicone-gel—filled prosthesis, he explained, is hemispheric and has an external velour of polyurethane. Velour-coated Dacron straps are attached to it. "The velour," he said, "acts as a trellis for ingrowth of fibroblasts and provides firm fixation, obviating the formation of a space or fluid about the prosthesis."

The device is positioned against the urethral bulb. A right-angle forceps is inserted bluntly on either side between the crus and its respective pubic bone, and the tapes of the prosthesis are pulled through these tunnels. The straps are then tied over the prosthesis, thus compressing the bulb.

Of the 21 patients, he said, 15 had incontinence after transurethral prostatectomy, four had incontinence after suprapubic or retropubic prostatectomy, and two were incontinent after radical prostatectomy.

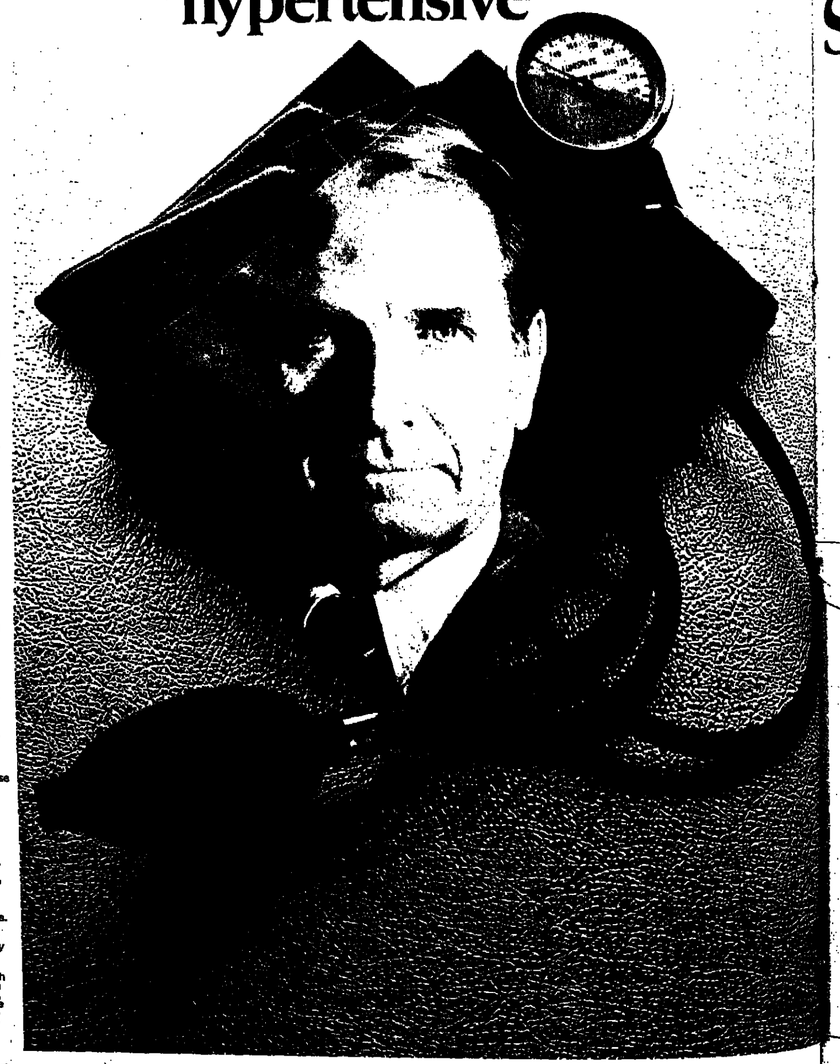
If necessary, he pointed out, the prosthesis can subsequently be injected without anesthesia and inflated with 2 to 10 cc. of a hyperoncotic solution. Owing to the self-sealing property of the Silastic sheath of the prosthesis, he said, leakage of the injected fluid is negligible. Dr. Kaufman declared, however, that none of the patients who were cured following implantation required injection of the prosthesis during the postoperative period. Follow-up of patients who did require injection, he said, is too short to permit evaluation. Of four patients who had injection of the capsule postoperatively, he added, one was cured and three have been improved.

Palace to Hospital

Medical Tribune World Service

Bombay, India—A palace in West Bengal will be converted into a 800-bed hospital by the state government if negotiations with the owner, the Maharajah of Cooch-Behar, are successful.

different yet highly effective approaches for the "after thiazide" hypertensive



Esimil®

guanethidine monosulfate 10 mg
hydrochlorothiazide 25 mg

Ser-Ap-Es®

reserpine 0.1 mg
hydralazine hydrochloride 25 mg
hydrochlorothiazide 15 mg

INDICATIONS

Esimil
Hypertension (other than labile forms) which cannot be adequately controlled with simpler agents; moderate to severe hypertension; sustained hypertension; almost all forms of fixed and progressive hypertensive disease; when side effects of other antihypertensives prevent effective treatment.

Ser-Ap-Es
All cases of hypertension except the mildest and the most severe.

CONTRAINDICATIONS

Esimil
Guanethidine: Proven or suspected pheochromocytoma; hypersensitivity to guanethidine. Do not use with MAO inhibitors.
Hydrochlorothiazide: Anuria; discontinue drug if renal shutdown occurs for any reason. Progressive hepatic disease may accelerate development of hepatic coma. Do not give to patients with known allergy to thiazides or other sulfonamide-derived drugs.

Ser-Ap-Es
Reserpine: Known hypersensitivity; mental depression, especially with suicidal tendencies; active peptic ulcer; ulcerative colitis.
Hydralazine: Hypersensitivity; coronary artery disease; mitral valvular rheumatic heart disease.
Hydrochlorothiazide: See hydrochlorothiazide section above.

WARNINGS

Antihypertensives are potent drugs and can lead to disturbing and serious clinical problems. Physicians should be familiar with all drugs and their combinations before prescribing, and patients should be warned not to deviate from instructions.

Esimil
Guanethidine: Warn patients about the potential hazards of orthostatic hypotension, which can occur frequently. To prevent fainting, patients should sit or lie down with onset of dizziness or weakness, which may be particularly bothersome during initial dosage adjustment and with postural changes. Postural hypotension is most marked in the morning and is accentuated by hot weather, alcohol, or exercise. Warn patients to avoid sudden or prolonged standing or exercise while taking guanethidine.
Concurrent use with rauwolfia derivatives may cause excessive postural hypotension, bradycardia, and mental depression.
If possible, withdraw therapy 2 weeks prior to surgery to avoid possible vascular collapse and to reduce hazards of cardiac arrest during anesthesia. If emergency surgery is indicated, administer preanesthetic and anesthetic agents cautiously in reduced dosage, with oxygen, atropine, and vasopressors ready for immediate use. Give vasopressors with extreme caution because patients on guanethidine may have a greater propensity for cardiac arrhythmias.
Febrile illness may reduce dosage requirements.
Due to catecholamine depletion and increased responsiveness to norepinephrine, special care is required when treating patients with a history of bronchial asthma, since the condition may be aggravated.
Hydrochlorothiazide: Small bowel stenosis, with or without ulceration, has been associated with use of enteric-coated thiazides with potassium, and with enteric-coated potassium alone. These bowel lesions have caused obstruction, hemorrhage, and perforation; surgery was frequently required and deaths have occurred. Available information tends to implicate enteric-coated potassium salts. Therefore, coated potassium-containing formulations should be used only when dietary supplementation is not practical and discontinued immediately if abdominal pain, distention; nausea, vomiting, or GI bleeding occurs.
Lowering of blood pressure in hypertensive patients may sometimes result in nitrogen retention, and also result in reduced renal blood flow, particularly in those with impaired renal function. If progressive renal insufficiency is observed, discontinuance of drug may be desirable. In patients with renal disease, thiazides may precipitate azotemia. Cumulative effects may develop in those with impaired renal function. Dosage should always be carefully titrated.
Pay special attention to electrolyte balance of patients with severe hepatic insufficiency. In patients with cirrhosis and ascites, watch for symptoms of impending hepatic coma (confusion, drowsiness, tremor) and test for increased arterial ammonia concentration, sodium and potassium excretion. Thiazides may decrease glucose tolerance; use cautiously in diabetics.
Hyperuricemia may occur but is generally reversed by a uricosuric agent.
Thiazides may decrease arterial responsiveness to norepinephrine and increase responsiveness to tubocurarine; if possible, withdraw therapy 2 weeks prior to surgery. Hypotensive episodes under anesthesia have been observed. If emergency surgery is indicated, preanesthetic and anesthetic agents should be administered in reduced dosage.
The possibility of sensitivity reactions should be considered in patients with a history of allergy or bronchial asthma.

Ser-Ap-Es
Reserpine: Withdraw reserpine 2 weeks before surgery, if possible. For emergency surgical procedures, give vagal blocking agents parenterally to prevent or reverse hypotension and/or bradycardia.
Electroshock therapy should not be given to patients receiving rauwolfia preparations, since severe and even fatal reactions have been reported. Discontinue for 2 weeks before giving electroshock therapy.
Hydralazine: Hydralazine, particularly if given for prolonged periods, may produce an arthritis-like syndrome, leading in rare instances to a clinical picture simulating acute systemic lupus erythematosus. Most of these reactions are reversible upon withdrawal of therapy. These side effects are not anticipated even with maximal recommended dosage of Ser-Ap-Es.
Hydrochlorothiazide: See hydrochlorothiazide section above.

Usage in Pregnancy

Esimil
Guanethidine: The safety of guanethidine for use in pregnancy has not been established; therefore, this drug should be used in pregnant patients only when, in the judgment of the physician, its use is deemed essential to the welfare of the patient.
Hydrochlorothiazide: Thiazides should be used with caution in pregnant or lactating patients since this drug crosses the placental barrier and appears in breast milk and may result in fetal hyperbilirubinemia, thrombocytopenia, or altered carbohydrate metabolism. It is therefore possible that the adverse reactions seen in the adult may occur in the newborn.

Ser-Ap-Es
Reserpine: The safety of rauwolfia preparations for use in pregnancy or lactation has not been established; therefore, this drug should be used in pregnant patients only when, in the judgment of the physician, its use is deemed essential to the welfare of the patient.
Hydralazine: Although there has been no adverse experience with hydralazine in pregnancy, there have been no systematic animal reproduction studies to support the idea of safety in pregnancy. The drug should be used in pregnancy only when, in the judgment of the physician, its use is deemed essential to the welfare of the patient.
Hydrochlorothiazide: See hydrochlorothiazide section above.

PRECAUTIONS

Esimil
Guanethidine: Give cautiously to patients with severe coronary insufficiency, recent myocardial infarction, or cerebrovascular insufficiency. Give Esimil with extreme caution to those with severe cardiac failure.
Appetite suppressants (eg, amphetamines), mild stimulants (eg, ephedrine, methylphenidate), and tricyclic antidepressants (eg, imipramine, protriptyline, doxepin) may decrease the hypotensive effect of guanethidine. Wait one week after discontinuing MAO inhibitors before starting guanethidine.
Peptic ulcers or other chronic disorders may be aggravated by a relative increase in parasympathetic tone. Periodic blood counts and liver function tests are advised during prolonged therapy.
Hydrochlorothiazide: Perform serum potassium, BUN, uric acid, and blood sugar tests prior to and at appropriate intervals during therapy. Watch patients for clinical signs of fluid or electrolyte imbalance (hyponatremia, hypochloremic alkalosis, hypokalemia). Warning lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, GI disturbance. Serum and urine electrolyte determinations are particularly important when patient is vomiting excessively; receiving parenteral fluids, steroids, or ACTH; during brisk diuresis; in presence of severe cirrhosis.
Interference with adequate oral intake of electrolytes will also contribute to hypokalemia. Digitalis may exaggerate metabolic effects of cardial activity. (Signs of digitalis intoxication may be produced by formerly tolerated doses of digitalis.) Hypokalemia may be avoided or treated with supplemental potassium or potassium-rich foods. Supplemental potassium is indicated when serum potassium is < 3 mEq/liter or less, or if patient is receiving digitalis. Chloride deficit may be corrected with ammonium chloride (except in those with hepatic or renal disease) and largely prevented by a nonrigid salt intake. If dietary salt is unduly restricted, especially during hot weather, in severely edematous patients with congestive heart failure or renal disease, a low salt syndrome may complicate therapy with thiazides.
Transient elevations in plasma calcium may occur in patients taking thiazides, particularly in those with hyperparathyroidism. Pathological changes in the parathyroid gland have been reported in a few patients on prolonged thiazide therapy.
Hyperuricemia (or frank gout) may be precipitated in certain patients. Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Latent diabetes may become manifest during thiazide therapy.
If nitrogen retention indicates onset of renal impairment, discontinue drug.

Ser-Ap-Es
Reserpine: Use cautiously in patients with history of peptic ulcer, ulcerative colitis, or other GI disorders. May precipitate biliary colic in patients with gallstones.
Discontinue at first sign of mental depression, keeping in mind possibility of suicide. Use with extreme caution in those with history of mental depression. Take special care with asthmatics and in hypertensives with renal insufficiency. Use cautiously with digitalis, quinidine, and guanethidine. Not recommended for aortic insufficiency.
Hydralazine: Use cautiously in suspected coronary artery disease, cerebral vascular accidents, and advanced renal damage.
Peripheral neuritis, evidenced by paresthesias, numbness, and tingling, has been observed. Published evidence suggests an antipyridoxine effect and addition of pyridoxine to the regimen if symptoms develop.
Blood dyscrasias, consisting of reduction in hemoglobin and red cell count, leukopenia, agranulocytosis, and purpura, have been reported rarely. If such abnormalities develop, discontinue therapy.
Periodic blood counts and liver function tests are advised during prolonged therapy.
Hydrochlorothiazide: See hydrochlorothiazide section above.

ADVERSE REACTIONS

Esimil
Guanethidine: *Frequent reactions due to sympathetic blockade*—dizziness, weakness, lassitude, syncope. *Frequent reactions caused by unopposed parasympathetic activity*—bradycardia, increase in bowel movements, diarrhea (which may be severe and require discontinuation of the drug). *Other common reactions*—inhibition of ejaculation, fluid retention, edema, congestive heart failure. *Less frequently*—dyspnea, fatigue, nausea, vomiting, nocturia, urinary incontinence, dermatitis, scalp hair loss, dry mouth, rise in BUN, ptosis of the lids, blurring of vision, parotid tenderness, myalgia, muscle tremor, mental depression, chest pains (angina), chest paresthesias, nasal congestion, weight gain, and asthma in susceptible individuals.
Hydrochlorothiazide: *Gastrointestinal*—anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic), pancreatitis, hyperglycemia, glycosuria. *Central nervous system*—dizziness, vertigo, paresthesias, headache, xanthopsia. *Dermatologic-hypersensitivity*—purpura, photosensitivity, rash, urticaria, necrotizing angiitis. *Hematologic*—leukopenia, thrombocytopenia, agranulocytosis, aplastic anemia. *Cardiovascular*—orthostatic hypotension may occur and may be potentiated by alcohol, barbiturates, or narcotics. *Miscellaneous*—muscle spasm, weakness, restlessness. Whenever adverse reactions are moderate or severe, reduce dosage or withdraw therapy.

Ser-Ap-Es
Reserpine: Increased salivation, increased gastric secretions, nausea, vomiting, anorexia, aggravation of peptic ulcer or ulcerative colitis, increased intestinal motility, diarrhea, angina-like syndrome, ectopic cardiac rhythms particularly when used concurrently with digitalis, bradycardia, flushing, and mental depression, drowsiness, lassitude, nervousness, paradoxical anxiety, nightmares (which may be an early sign of mental depression), rarely atypical Parkinsonian syndrome, central nervous system sensitization (manifested by dull sensorium, deafness, glaucoma, uveitis, and toxic psychosis), pruritus, skin rash, dryness of mouth, dizziness, headache, syncope, epistaxis, purpura due to thrombocytopenia, asthma in susceptible persons, nasal congestion, weight gain, impotence or decreased libido, enhanced susceptibility to colds, dysuria, conjunctival injection, dyspnea, muscular aches.
Hydralazine: *Common*: Headache, palpitations, anorexia, nausea, vomiting, diarrhea, tachycardia, angina pectoris.
Less frequent: Nasal congestion; flushing; lacrimation; conjunctivitis; paresthesias; edema; dizziness; tremors; muscle cramps; psychotic reactions characterized by depression, disorientation, and rarely hypersensitivity reaction including skin rash and vascular collapse; constipation; difficulty in micturition; enterocolitis; dyspnea; paralysis; lymphadenopathy; splenomegaly.
Hydrochlorothiazide: See hydrochlorothiazide section above.

DOSAGE

Esimil
Optimal dosage must be determined for each individual. Note: 10 mg guanethidine monosulfate present in Esimil is equivalent to 8.4 mg guanethidine sulfate USP (Ismelin®).
Before starting therapy, consult complete product literature.

Ser-Ap-Es
One or 2 tablets t.i.d. To initiate therapy, 1 tablet t.i.d. is recommended. For maintenance, adjust dosage to lowest patient requirement. When necessary, more potent antihypertensives may be added gradually in dosages reduced by at least 50 percent.

HOW SUPPLIED

Esimil
Tablets (white, scored), each containing 10 mg guanethidine monosulfate and 25 mg hydrochlorothiazide: bottles of 100.

Ser-Ap-Es
Tablets (dark salmon pink, dry-coated), each containing 0.1 mg reserpine, 25 mg hydralazine hydrochloride, and 15 mg hydrochlorothiazide; bottles of 100 and 1000.
Consult complete literature of both products before prescribing.

CIBA Pharmaceutical Company
Division of CIBA-GEIGY Corporation
Summit, New Jersey 07901

8/1997 17

CIBA

Even if blood pressure and other parameters are similar, different patients can have very different needs.
So CIBA provides two different approaches for patients who need more than a sedative or diuretic—less than the most potent antihypertensive therapy.

Ser-Ap-Es® or Esimil®

reserpine 0.1 mg
hydralazine hydrochloride 25 mg
hydrochlorothiazide 15 mg

guanethidine monosulfate 10 mg
hydrochlorothiazide 25 mg

the most widely prescribed thiazide-containing antihypertensive combination

□ **because it provides hydralazine.** Only Ser-Ap-Es adds Apresoline® (hydralazine) to rauwolfia-thiazide. Dosage of each component is lower than if prescribed alone.

□ **because hydralazine maintains or increases renal blood flow** through peripheral vasodilation.

□ **because hydralazine relaxes cerebrovascular tone.**

□ **because reserpine has a beneficial calming action.**

□ **because less rigid dietary salt restriction** is often possible due to the saluretic action of hydrochlorothiazide.

an equally valuable alternative therapy

□ **because it provides guanethidine**—perhaps the most effective antihypertensive ever available—tempered with hydrochlorothiazide for smooth control of blood pressure.

□ **because it often controls hypertension where other therapy fails.** And when Esimil controls blood pressure, it usually stays controlled.

□ **because it contains no rauwolfia**—an important consideration when there is a history of depression.

□ **because it contains 25 mg hydrochlorothiazide per tablet**—for patients who can benefit from additional thiazide medication.

□ **because dosage is simple.** Once-a-day dosage is usually enough.

Ser-Ap-Es or Esimil
Because there's more to hypertension than you can get "off the cuff"

CURRENT OPINION

Senior Medical Consultants

Why Waste Valuable Clinical Experience?

By Joseph Moldaver, M.D.
New York

We are facing a dilemma today which is really a paradox. We in the medical profession fight to provide additional healthy years for each person, but when that individual attains the age of 65, the second part of the paradox occurs: we retire people and cast them aside.

In these times, when the way we deliver health care services is being severely questioned, and when continuing education of physicians tends to become mandatory, we must ask ourselves: How can we utilize the talents of dedicated physicians who have held responsible teaching positions until they were 65 years old? We say there is an answer.

How would you like to have a clinical professor of medicine or surgery or a professor of pathology as a teacher in your continuing medical education program, and for consultation on clinical rounds, and to lend his varied expertise to your residents and house staff? Highly motivated physicians who were formerly respected teachers in the different fields of medicine have formed a group known as Senior Medical Consultants (SMC). These SMCs are recently retired faculty members whose skills, competence, experience, and wisdom are an untapped source of wealth for hospitals and clinics that are not affiliated with medical schools. Here are distinguished physicians, available on a regular basis for clinical conferences or rounds. Our objectives for the group are:

1. To provide clinical consultants or physician-teachers to hospitals not affiliated with medical schools—in any department.
2. To provide outpatient departments and clinics with the same type of expertise.
3. To assist hospitals and clinics to become small teaching centers.
4. To provide an opportunity to bring SMCs to the patient's bedside, and to present at clinical conferences the hospitalized patient, as well as some cases selected from outpatient departments.

SMC is currently funded by NIH as a pilot project. It is functioning in 32 hospitals in the New York–New Jersey–Connecticut area. There are 68 clinical consultants involved, and the response by participating hospitals has been one of steady demand.

The SMCs themselves have an advisory council of younger, yet-to-be-retired people from all lines of the health care spectrum, from the clinical professor of medicine to an executive hospital director to a president of a medical society.

The SMC physician is not chosen by a hospital to conduct peer review, be a critic, or manage patient care while conducting case conferences. The hospital selects the individual physician-teacher whom it feels will be of most benefit. Briefings prior to engagement are held, so that the best possible preparation can be undertaken by the physician-teacher. After each period of attendance there is an evaluation by both the physician-teacher and the hospital. This is accomplished by means of a questionnaire and an interview. There is a token honorarium for the clinical session (two to three hours) paid for under the group's NIH contract.

We believe that over-all evaluation of the project will show the following:

1. The period of some hospitalizations could eventually be shortened.
2. The number of tests per patient could be reduced.
3. Fewer visits to outpatient departments could be expected.

We also feel that in many instances a complete diagnostic work-up could be achieved and that therapeutic advice given in the outpatient departments could avoid some hospitalizations.

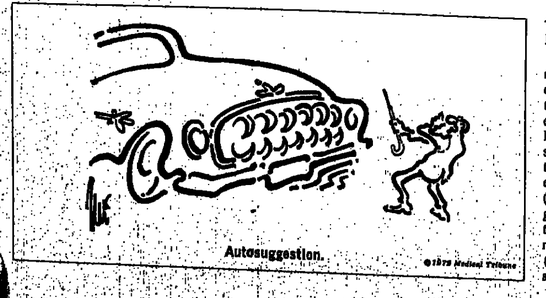
One could also expect that, by using the expertise of the SMC, the strength of an outpatient department, or even a hospital department, could be enhanced significantly. This would finally result in better care in the community hospital, especially in ghetto-area hospitals, where chronic shortages of staff and unbearable burdens on clinics and outpatient departments are endemic.

Since there is such a tremendous need in hospitals throughout the country for the services of outstanding, knowledgeable physicians, the SMC program could provide men who are authorities in their fields. The hospital taking part in the program can achieve a university-quality educational level without its staff having to travel to a medical center. The program is also beneficial to the foreign physicians who make up a large part of our house staff.

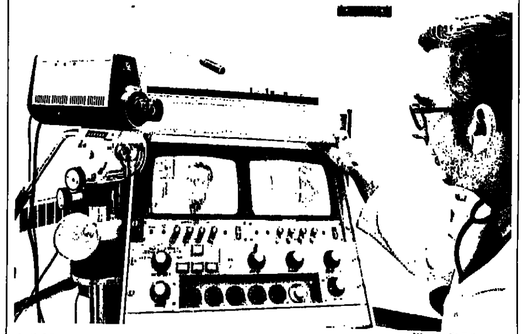
The SMC program is flexible, to conform to the needs of the utilizing hospital. Its members are available for diagnostic or management duties, for help in the introduction of new approaches and methods; as aides in creating small teaching centers, to participate in clinical conferences, to make ward rounds, attend outpatient clinics, and to bring teaching-center expertise to outlying institutions.

With the willingness of the SMCs to "fill gaps," to complement existing programs, and to expand services, the wasteful policy of retirement at 65 will be reversed, and we will be able to return healthy, energetic, motivated, and knowledgeable physicians, clinicians, and teachers to the service of the health care field. In a time of dire need for health skills, this program provides one way out of the current paradox.

Inquiries from directors of medical education, hospital administrators and interested faculty members are welcome, and should be addressed to Joseph Moldaver, M.D., Director, Senior Medical Consultants Program, 140 East 54th Street, New York, N.Y., 10022, or to the Administrative Office of Senior Medical Consultants Program, St. Barnabas Hospital, Third Avenue and 183rd Street, Bronx, N.Y., 10457.



Cable TV Makes Physician Accessible



Minneapolis Tribune Photo

A "video cart," a mobile hand-pushed unit that contains a two-way closed-circuit television and monitoring system is being tested in rural areas of Minnesota, where a wide-ranging selection of specialists is unavailable. Above, Dr. John Wempner, of the Lakeview Clinic in Jonathan, Minn., program director of the video cart test, views x-ray on the right screen as his comments are broadcast to an identical unit miles away connected by coaxial cable and monitored on screen at left.

Doctors' Debate

Medical Tribune *frequently receives extensive and well-documented communications from physicians on current subjects of controversy or those of great current medical interest. We invite contributions in these areas for presentation in this new feature.*

How Deep the Probe?

Editor, Medical Tribune:

In regard to your editorial on November 8, "Heartening Hypertensive Perspectives —Part II," it is really too bad that physicians have to wait until a professor type gets the disease and goes through the torture of evaluation to learn what thousands of internists across the country have known for at least 10 years—that most blood pressure problems can be readily controlled with minimal amounts of medication and that those who do not respond to the usual measures certainly should be studied, particularly when they have secondary involvement of eyes, kidneys, heart, brain, etc.

Think of the thousands and literally millions of dollars that have been wasted to find the cause of a hypertension and then, in a given instance, have it limited to the renal area, only to have the wrong kidney taken out, as was done some years back in many institutions.

While carrying on a very active practice of internal medicine, dealing with hypertensive and cardiovascular problems, I find myself only occasionally referring a patient who does not respond to routine blood pressure medication. Why this cannot be done everywhere is beyond me.

When a single chest x-ray is now at least $15 and an IVP is $40 to $50, etc., if we have to get to the final true cause of every entity that we treat, the country certainly will be bankrupt.

Further editorials such as yours hopefully will be conducive to the re-establishment of *clinical judgment*, which seems to be lacking during the teaching process.

Leopold A. Viger, M.D.
Biddeford, Me.

■

Acupuncture

Editor, Medical Tribune:

Having first become acquainted with that modality of Chinese medicine now so frequently referred to as "the art of acupuncture" over 20 years ago and having rubbed elbows with its practice, so to speak, in Korea, where it had been declared illegal some years before, it is no surprise to find that, like so many other aspects of human endeavor, it has now been "discovered" (like "love," for example) by the current generation. Regardless of its being subject to penalty when used in Korea, it was nearly always possible to find a Chim-Jangi (native practitioner of the art) in each small village, if one was not suspected of being an agent of the State. In order to avoid prejudice (being down on something one is not up on) I obtained a set of the needles and charts later in Formosa, but never used them.

I have subsequently thoroughly perused some of Dr. Felix Mann's books and just recently attended the Symposium on Acupuncture at Stanford, held under the auspices of the Academy of Parapsychology and Medicine, paying close attention both to protracted papers, opinions, and some demonstrations performed on the stage for some nine or 10 hours. Approaching this with as open a mind as the undersigned is capable of, it remains in this writer's opinion either related to or actually a form of hypnotherapy.

The fact that well-qualified physicians and their represented organizations are attempting to further test and evaluate this form of treatment is, I believe, much to the credit of the medically trained mind; however, the rather blind, uncritical, poorly justified, careless acceptance of this practice by many allopathic practitioners, who should know better than to mistake enthusiasm for valid results, is appalling.

> *"...It remains in this writer's opinion either related to or actually a form of hypnotherapy."*

It is probably unknown to many of our recently trained physicians that in London sometime in the 1870s, I believe, there was a hospital where for several years surgery was performed mostly under hypnosis. The problem, however, was that the preparation of the patient might often require several weeks and in that time some cases of "acute abdomen" tended to deteriorate rather noticeably.

The publicity given this practice, I'm sure, must give the practitioners of it in various parts of the Orient real cause to chuckle and in certain cases to come to the U.S.A. and fatten their pocketbooks at the expense of a fair number of physicians who in some cases even have national reputations. "Brain washing" can occur even in a modern community where the great blessing of the "total hip" and the outstanding technical developments have made heart and other organ transplants possible.

Possibly the easiest person to spot is the egghead? I wonder, "Will the real disciples of acupuncture stand up" and strike back?

Walter R. Miller, M.D., F.A.C.S.
Oakland, Calif.

Respiratory Distress

Helsinki—A possible prophylactic measure against respiratory distress in premature infants has been developed by Swedish investigators.

The new technique entails the use of a concentrated surfactant suspension that, in animal trials, was deposited in the pharynx of premature rabbit fetuses before they started breathing. The resultant air expansion of the lungs prolonged the survival of the fetus, the investigators told the ninth International Congress of the International Academy of Pathology.

They prepared a concentrated surfactant by centrifugation of alveolar wash from an adult rabbit for one hour at 1,000 g and 4°C. This suspension was deposited in the pharynxes of premature rabbits at the 27th day of gestation. Untreated fetuses from the same litter served as controls.

While all control fetuses died within 30 minutes, the majority of the treated animals survived for a significantly longer period, some up to 165 minutes.

The authors were Drs. Goran Enhorning, currently at Toronto Western Hospital, and Gertie Grossman and Bengt Robertson, of Karolinska Hospital, Stockholm.

They said that further studies would center on the question of the optimal dose and composition of the surfactant deposit.

Kala-Azar in Iraq

Baghdad—An outbreak of kala-azar is causing concern to health authorities in northern and central Iraq.

About 80 children, all under the age of five, have been admitted to the Children's Hospital here.

The World Health Organization is assisting the Iraqi Government in research on methods of prevention and treatment of the disease, undertaking personnel training, and supplying equipment.

Somalia Anti-TB Drive

Mogadishu, Somalia—As part of a stepped-up drive against tuberculosis, all children born in hospital in Somalia are now receiving BCG vaccination.

The TB infection rate among Somali children rises from about 20 per cent at the age of five to 60 per cent at 15.

Despite the efforts of the health authorities, wide areas of the country are still not reached by the vaccination drive.

Baby-Food Additives

Geneva, Switzerland—Food for babies under 12 weeks should contain no additives whatsoever, a joint FAO/WHO expert committee recommends.

The digestive system of a child of this age cannot convert the additives, it said, and these may accumulate in the body, causing damage that come to light only later.

Although babies over 12 weeks have a better detoxicating mechanism, the committee still recommended that additives be kept to an absolute minimum.

Pesticide residues, said the WHO/FAO committee, should also be kept out of baby foods, since there is no evidence yet available on the minimum safety level.

Antismoking Lectures

Tel Aviv, Israel—All students from the seventh grade through the 12th grade will receive antismoking lectures in all Israeli schools, according to a plan worked out by the Ministry of Education and Culture. The lectures will be given by physicians, nurses, and educators.

Polio Rises in Spain

Madrid—Poliomyelitis incidence continues to rise in Spain. Last year 213 polio type 1 cases were reported, one of the highest levels reached in the past decade.

Hospital Prenatal Care Reportedly Improving

Medical Tribune Report

St. Louis—Improved hospital care of the pregnant patient and more adequate prenatal care were named as the primary reasons for improved obstetric outcome over the past five to 10 years at Denver General Hospital, a "medium-sized city-county hospital" caring for patients from a low socioeconomic area.

This improvement can be seen in the drop in perinatal mortality from 4.9 per cent in 1964 to 2.7 per cent in 1971 and in a parallel drop in low birth weight incidence, which had averaged 18 to 20 per cent through 1966 but was slightly less than 14 per cent in 1971.

At a meeting, here, of the Central Association of Obstetricians and Gynecologists, a team from the hospital's Obstetrical and Gynecological Service spelled out the changes that brought these results, and they add up to one word: money.

- Thus, in 1965, they reported, a Maternal and Infant Care grant from the Department of Health, Education, and Welfare's Children's Bureau was awarded to the Denver Department of Health and Hospitals, to be implemented through Denver General Hospital.
- In 1966, under the auspices of the Denver Department of Health and Hospitals, a federally financed Neighborhood Health Program was established.
- In 1969, the hospital received a separate family-planning program grant from HEW.

Hospital Staff Augmented

At the hospital alone, it was possible to augment the staff from one full-time physician to nine full-time obstetrician-gynecologists; instead of four to six residents, there are now nine; and there have been significant increases in the number of nurses, pediatricians, and anesthesiologists.

Prior to 1966, the physicians said, "outpatient facilities existed at Denver General Hospital for the entire indigent population of the city.... At present there are two large health centers and seven satellite health stations located in the lower income census tracts of the city." Family physicians, pediatricians, obstetricians and gynecologists, specialty consultations, nurses, social workers, and nutritionists are easily accessible.

"A fundamental part of the Neighborhood Health Program has been the employment of indigenous personnel as family health counselors, who, after appropriate training, reach out into the community referring medical problems to the clinics, aid in carrying out treatment, and assist with other community health problems," they emphasized.

The authors, Dr. Horace E. Thompson, director of the service, and Drs. John G. McFee, Albert D. Haverkamp, and Freeman H. Longwell, also listed a third factor, in addition to improved hospital care and prenatal care, that contributed to improved obstetric outcome: a drop in maternal age and a decrease in the number of patients of great parity.

Linked to this population shift have been decreases in the number of twins delivered, in the incidence of placenta previa, and in the occurrence of such diseases as hypertension, renal disease, diabetes, and anemia, which are more prevalent with advancing age and parity.

"This improvement, however, only represents a beginning," the team pointed out. "Problems continue to flourish and patient care, even under these improved circumstances, is not always adequate."

They urged further increases in staff for the labor-delivery area, more attention to high-risk pregnancies, and expanded efforts in family-planning education.

IMMATERIA MEDICA

Ordonnance

It may be the merry yuletide season, but we have just been informed that at least two French groups are concerned about us for reasons that are not at all related to such winter hazards as the skyrocketing cost of filling one small miracle-fabric sock with gift-wrapped seasonal cheer.

We quote from a letter recently received:

"The Cognac Producers of France are worried about the threat of influenza in the United States and wish to advise that a pitcher of orange juice spiked with cognac may be just what the doctor ordered.

"The Champagne Producers Association of France is equally concerned with the menaced state of American health and feels it has a (bubbly) alternative to cognac should disaster strike or merely impend.

"If the bubbly remedy is chosen, the Association emphasizes that champagne corks should never be popped. Popping is a bit vulgar, and flying corks are potentially dangerous. The cork should sigh erotically when extracted."

We hasten to add that the letter came to us from a chap who represents the American interests of the Cognac Producers of France and the Champagne Producers Association of France and may be motivated by crass commercialism. But we couldn't resist that sentence about the sighing cork.

Anyone with a better flu remedy is invited to correspond.

* * *

A timely year-end note comes to us from Dr. Michael M. Stewart, who is with the Rockefeller Foundation in Bangkok.

Health Planning, 1972

Planners generate projections,
Doctor-critics make corrections.
Outcome? Programs, targets, ranges—
But patients don't see any changes.

* * *

"The project was designed to show the private medical sector and the general hospitals that medical emergencies involving acute intoxification could be handled in facilities and by staffs already available in any general hospital setting,' Dr. Treadway said."

—release from the Tennessee Department of Mental Health.

People get intoxificated down there?

* * *

After reading through the program sent us by Dr. Sam A. Nixon of Floresville, Tex., we're kind of sorry we weren't able to take in the Las Vegas convention of the American Institute of Hypnosis in conjunction with the American College of Medical Hypnotists.

Where else could you hear a paper titled: "Moans, Mirages & Mindreading"? Or see a film called "Saints, Phychics & Scientists"? Or take a "Special Mini-Course in 'Mind Control' "?

There also was a paper called "Communication with Plant Life by Means of the Polygraph," delivered by a chap described as "internationally known...for work with the CIA." Red blossoms had better watch out!

* * *

"As an end point in incidence studies death is preferable to many less clearly defined events."

—*Lancet.*

O statistician, we know where *thy* sting is.

* * *

"Political and medical figureheads who support more liberal drug laws simply do not realize how it would undermine the efficiency and profitability of a business."

—release from Dix and Eaton Inc. for *Modern Office Procedures.*

Oh, no! Not that! (And what's undermining the reference of your pronouns?)

Medical School Enrollment Increases Again

Medical Tribune Report

CHICAGO—A substantial increase in medical school enrollment was registered again in the 1971-72 school year, according to the 72nd annual report on medical education prepared under auspices of the Council on Medical Education of the American Medical Association.

First-year enrollment in 1971 increased by 1,013 to 12,361. Total enrollment was 43,650, an increase of 3,163 students over the previous academic year.

The increase was achieved both by opening new schools and by expanding enrollment at many of the existing schools. Total number of medical schools in the fall of 1971 was 108. Three new medical schools opened in September, 1972; another will open in January, and still another in June.

The number of graduates in the class of June, 1972, reached an all-time high of 9,551—577 more than in 1971.

Medical school enrollment in the United States has been increasing steadily for more than 10 years and at an even more rapid rate in the past five years. From 1960 to 1966, enrollment grew about 500 per year. In 1967 the increase amounted to 1,115 students, in 1968 1,295, in 1969 1,836, in 1970 2,818, and in 1971 3,163.

Increased minority representation in the medical student body was noted. Excluding the two traditionally black medical schools and Puerto Rico, in 1968-69 only 0.9 per cent of students enrolled were black. In 1971-72, 3.6 per cent were black.

The proportion of women in the student body increased to 11 per cent from 9.6 per cent.

Greater Financial Hardships Seen for Med Students

Medical Tribune Report

STANFORD, CALIF.—Faced with financial problems, medical schools will find it increasingly difficult to aid students in meeting the rising costs of medical education, according to a study headed by a Stanford University medical educator.

The report calls on Federal and state governments to increase their contributions to loan and scholarship programs, and on the medical establishment to explore additional methods for assisting students before the situation reaches crisis proportions.

As enrollments grow and the representation of students from low-income families increases, greater difficulties will be faced in finding adequate sources for student financial assistance, the report predicts.

In 1970 about $39,000,000 was available in the United States in the form of loans and grants to assist medical students, the study shows. The need for student loans and scholarships will reach $78,000,000 by 1975 if enrollments increase by 50 per cent and costs continue to escalate at the present rate of 5 per cent a year, according to the report.

"Because of the anticipated influx of low-income students, a more realistic figure for aggregate need may be $100,000,000 by that time," the report adds.

The study was done under the auspices of the Alfred P. Sloan Foundation. Its authors are Dr. Bernard W. Nelson, associate dean for education at the Stanford University School of Medicine; Richard A. Bird, vice-president, Analytical Planning Consultants, Inc., Honolulu; and Gilbert M. Rodgers, an independent consultant now in Washington, D.C.

TRIBUNE SPORTS REPORT

It's a Bird, It's a Plane—No, It's Dr. Thomas in a Balloon

Medical Tribune World Service

BRIMFIELD, MASS.—When the wind drops on late summer afternoons or on crisp winter weekends, farmers and villagers in the vicinity of this village in southern Massachusetts are no longer surprised to observe the bright striping of a huge hot-air balloon drifting serenely across their sky in a scene reminiscent of *Around the World in 80 Days.*

DR. THOMAS

Most of them recognize the balloon of Dr. Clayton L. Thomas of nearby Palmer, vice-president of Tampax, Inc., and consultant on human reproduction at the Harvard School of Public Health. Many of the farmers—chiefly those with large, open fields—have come to know Dr. Thomas firsthand on those not-infrequent occasions when his huge red, gold, and green globe has made a landing on their back pastures.

Most of the time, a balloon landing in your backyard is a welcome diversion in quiet Brimfield, but if a farmer is not enthusiastic about having an unannounced visitor, he is usually mollified by Dr. Thomas' warm apologies and the bottle of champagne he leaves in his hands.

Dr. Thomas tells of a fellow balloonist in the Midwest whose landing on a farm "caused a couple dozen sows to abort; fortunately, his insurance company paid the damages." For this and other hazards, ballooning insurance costs some $2,000 annually.

The first balloonists burned straw to heat the air that provided the lift for their paper balloons; Dr. Thomas uses liquid propane and three burners attached to the top of an aluminum gondola. In flight there is at least a 15-second time lag between turning on the burners and heating the large volume of air in the balloon (56,400 cubic feet), sufficiently to obtain a lifting effect.

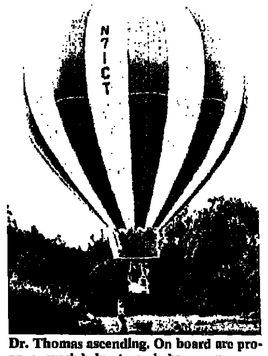
Unless the burners are used periodically, the balloon will descend gradually as the air inside its gaudy skin cools. It can be brought down more speedily by a pull on the cord that opens a vent near the top. In an emergency, a yank on another cord can rip out the entire crown of the hot-air bag.

Because he can control only the rise or descent of his craft, not its horizontal course, Dr. Thomas is a stickler for following Federal Aviation Agency regulations governing hot-air balloons. He watches the weather carefully and doesn't fly unless he has better than the required 1,000-foot ceiling and 3-mile visibility.

Although FAA regulations permit ballooning in winds up to 10 mph, "I prefer to go up with winds around 5 miles an hour," Dr. Thomas said. "I double-check on the weather reports by sending up a dime-store balloon filled with helium to see just what the wind speed and direction are from my balloon port."

He also carries four hours' worth of propane and extra lighters for his burners and insists that his passengers wear safety helmets in case of a rough landing.

When aloft, Dr. Thomas periodically checks air currents at his altitude by dropping tissues. If wind velocity increases, he may try for an altitude where it is less vigorous.



Dr. Thomas ascending. On board are propane, crash helmets, and champagne.

If that doesn't work, he must either land or risk being carried along for great distances—and in Massachusetts, the Atlantic is never very far away.

When weather conditions are good, Dr. Thomas said, there is probably nothing quite so tranquil as drifting gently and absolutely soundlessly above the world in an "aerostat," as the craft has traditionally been called. The pilot is an "acronaut" and his port an "aerostation."

Dr. Thomas is a pilot-examiner for lighter-than-air vehicles for the FAA. Since 1965 he has been a member of the U.S. Olympic Medical and Training Services Committee and the Sports Medicine Committee of the Amateur Athletic Union.

As a U.S. flight surgeon and former sport parachutist, the physician views his current avocation as only pleasantly adventurous. "Life is full of hazards," he quipped—"skiing, having a heart transplant, getting married...."

Chief instructor of the Balloon School of Massachusetts, of which he is also president, he is teaching his three teen-age children the skills of ballooning. Mrs. Thomas is more than happy to join the balloon excursions, since it took her several years to get her husband to give up parachuting as a sport.

In spite of all precautions, some lighter-than-air trips produce surprises. An unexpected wind recently caused Dr. Thomas and his passengers to set a crosscountry speed record from Brimfield to Woodstock, Conn.

As open space below them began to diminish, the aeronaut decided to land in the next available open field. The rules of the sport say never land when the wind is over 12 mph. Dr. Thomas estimates that when he hit that 10-foot embankment in Connecticut he was moving at 25 to 30 mph.

Luckily, he and his son, Clayton, Jr., and a passenger suffered only mild abrasions and contusions.

Filling the balloon with heated air generally is the most hazardous part of each flight. The modern balloon is made of lightweight, flame-retardant nylon, which will melt if touched by the flame of the propane burners.

The gondola, since the burners are mounted on its top, is tipped on its side and backed by a large fan to throw heated air into the unfolded skin of the balloon. Thomas children, students, and other volunteers must labor to hold the mouth of the huge bag open, yet not too close to the flames. As the balloon swells with heated air, its 80-foot length takes on a life of its own, and it can be a struggle to keep it from billowing up against the burners.

The lift-off from the grassy aerostation next to the Thomas home is like an illustration from a Jules Verne fantasy. Then, as Dr. Thomas sails soundlessly away, his crew dashes for a panel truck, the chase vehicle that tries to follow the balloon to assist with the landing and take balloon and gondola home.